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FANTASTIC STORY QUARTERLY

Vol. 1, No. 1 A THRILLING PUBLICATION Spring, 1950

A Complete Novel

THE HIDDEN WORLD . . EDMOND HAMILTON 11
Arnold Vance and three other scientists seek to outguess the odd and baffling phenomenon of the flesh creatures—and then swiftly find themselves taken as prisoners of an Earth within the Earth!

Two Complete Novelets

A VISIT TO VENUS . . . . . FESTUS PRAGNELL 106
Loted, the financier, had done humanity a world of harm, but when faced with death, he seized a chance to save the Earth from doom!

CHILDREN OF THE RAY . . . . J. HARVEY HAGGARD 142
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To face world's end calmly requires fortitude—or vengefulness!

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Professor van Manderpootz brings Dixon Wells' dream girl to life

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Pedro O'Brian Rubinsky throws the 21st Century into a big uproar

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COSMIC ENCORES . . . . . A DEPARTMENT 6
We raise the curtain on a new magazine for science fiction fans!

Published quarterly and copyright 1950 by Best Books, Inc., 29 Worthington Street, Springfield 3, Mass. Editorial and executive offices, 10 East 40th Street, New York 16, N. Y. Subscriptions: (12 issues) $3.00; single copies, $.25; foreign postage extra. Entry as second class matter pending at the post office at Springfield, Mass. Material is submitted at risk of the sender and must be accompanied by self-addressed, stamped envelopes. All characters in stories and semi-fiction articles are fictitious. If the name of any living person or existing institution is used it is a coincidence. Printed in the U. S. A.

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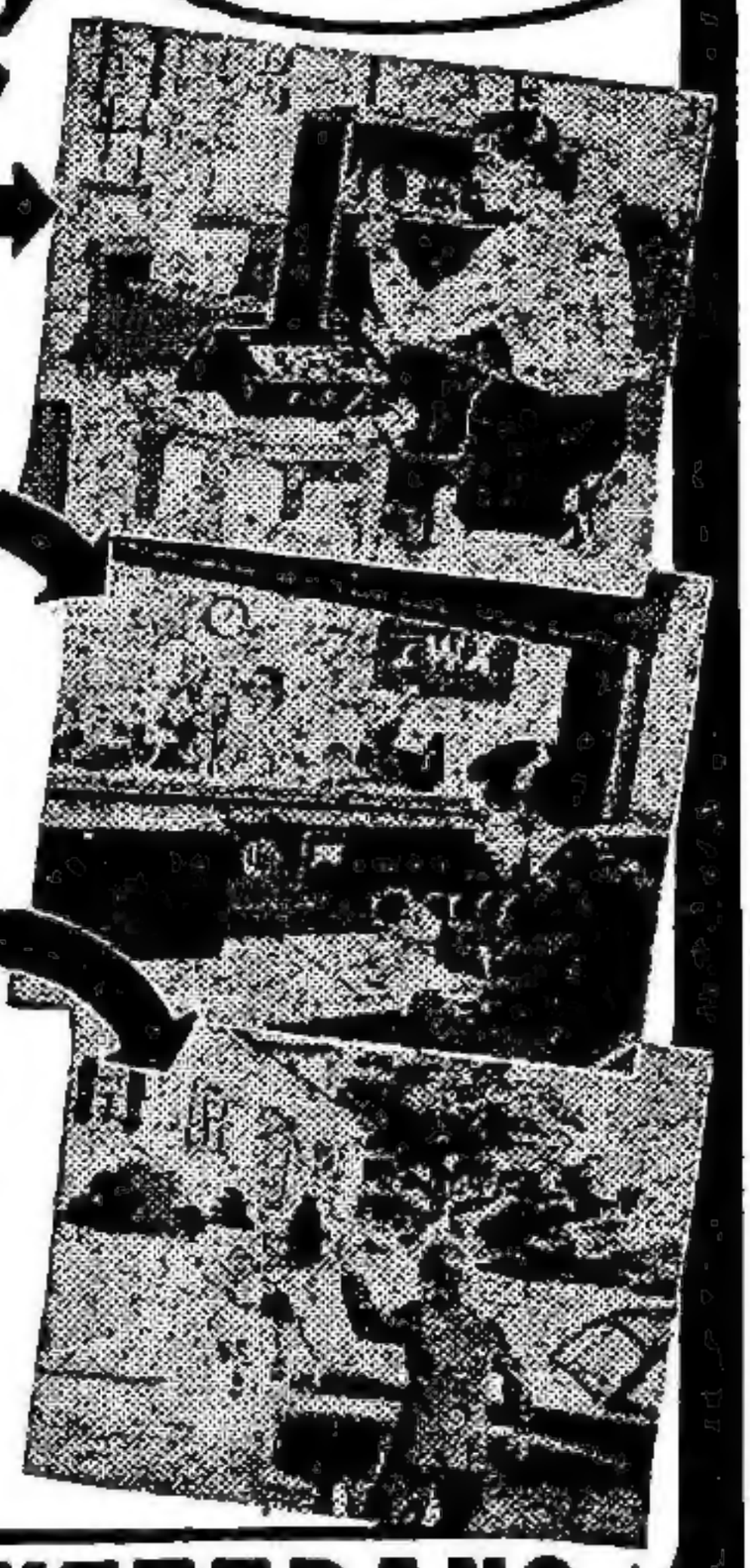
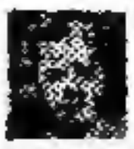


I TRAINED THESE MEN AT HOME



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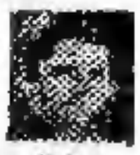

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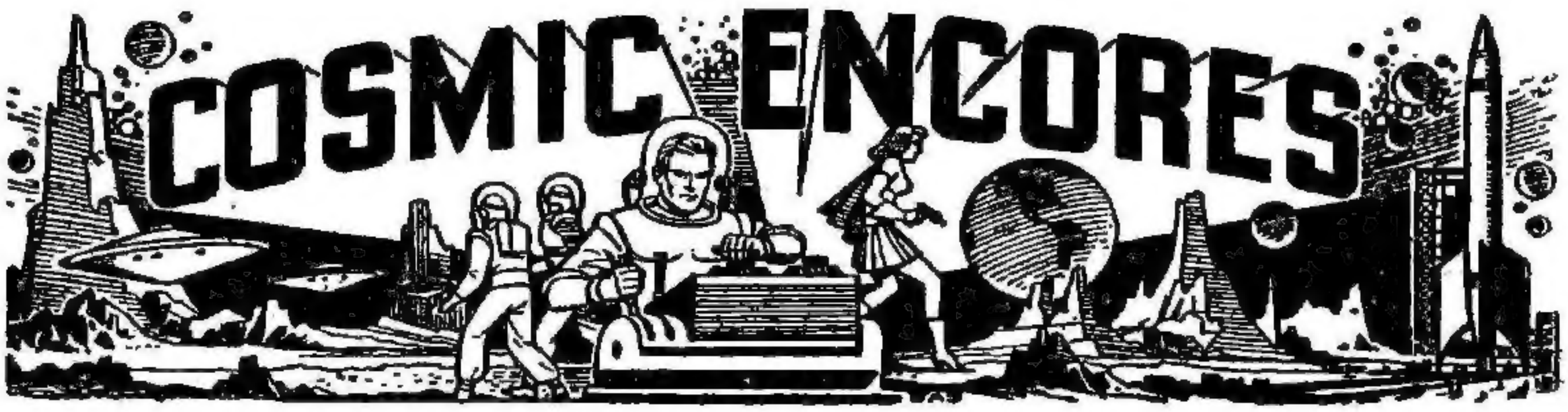

WE RAISE THE CURTAIN ON A NEW SCIENCE FICTION MAGAZINE

WE'RE out at last—FANTASTIC STORY QUARTERLY—and it is our earnest hope that we shall fill a long-empty gap in the field of science fiction so well and so thoroughly that we shall be around for generations to come.

Writing editorial comment on the first issue of a new magazine is a lot like being the obstetrician at one's own birth. But someone must perforce do the honors, so it seems to be up to us. Herewith a few paragraphs on the nature and purpose of this magazine.

Over the last several years there has been a persistent and steadily growing demand on the part of readers of our companion magazines, THRILLING WONDER STORIES and STARTLING STORIES, for the reprinting of the best of the hundreds of science fiction tales that appeared in such early stf magazines as the original WONDER STORIES, SCIENCE WONDER STORIES, AIR WONDER STORIES and the various quarterly and annual editions associated with them.

Science Fiction's Past

Since the founding of STARTLING STORIES more than eleven years ago we have endeavored to meet this demand, in part at least, through one reprint per issue in our Hall of Fame department. But until recently dictates of space forced us to limit our selections to short stories. And even the recent enlargement of STARTLING STORIES, which has enabled us to reprint some of the finest of the old novelets, has not been sufficient to satisfy those readers who desire to acquaint or reacquaint themselves with science fiction's past as well as its present and future.

"We want to read some of the famous long stories—the novels—of which we have heard but which we cannot find," is the collective cry of these readers.

Well, they're going to get them now. Those who insist that the old is far better than anything being published in stf today will have their chance to make comparisons. For, beginning in this issue with Edmond Hamilton's THE HIDDEN WORLD, we shall publish at least one full-length novel per issue.

Furthermore, along with the old we are going to bring you the new. There will be at least two mint-fresh stories per issue, drawn from the same stockpile which has made the short stories in our companion magazines, THRILLING WONDER STORIES and STARTLING STORIES, so notable in recent years.

A New World

There is, however, another and perhaps more important purpose behind this magazine. Since the conclusion of World War II the popularity of science fiction has been growing in what amounts to a geometric progression. Thousands of new aficionados are discovering stf and plunging eagerly into its multifarious fields of interest.

To most of these new devotees science fiction is an amazing new world—or rather a multiplicity of worlds. To them it has no past, only a present and future, and many of its forms, its conventions and—yes—its very limitations are puzzling.

To understand the science fiction of today and tomorrow it is necessary to understand what it has grown from and how it has grown. Hence, FANTASTIC STORY QUARTERLY, with its carefully culled selection of stories from the years between 1929 and 1936, years that today seem as long ago as those of Queen Victoria or General Grant.

It seems to us that this is the most satisfactory and entertaining sort of research for lovers of stf. In it the new generation can

(Continued on page 8)

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COSMIC ENCORES

(Continued from page 6)

find true classics in the field its members love, the while seeking past mile-posts which point the way along the road science fiction is now following. And veteran readers can nostalgically enjoy rereading stories which have become dim and faded memories.

The bulk of these stories have a tone far different from those of the present day. They were born in an era of peace less uneasy than that of today, of depression, of early sociological advance. The viewpoint of most of the authors was far removed from that of the men and women now writing for us.

Remember, the greatest war of all to date in known history has come and gone since the era of their composition. Radar, supersonic flight, the great new rockets, electric kitchens, pennicillin, streptomycin, the A-bomb and whole field of the recently released atom, have come to stay and space-flight lies immediately before us. Too much has happened for viewpoints not to change.

As Modern as Tomorrow

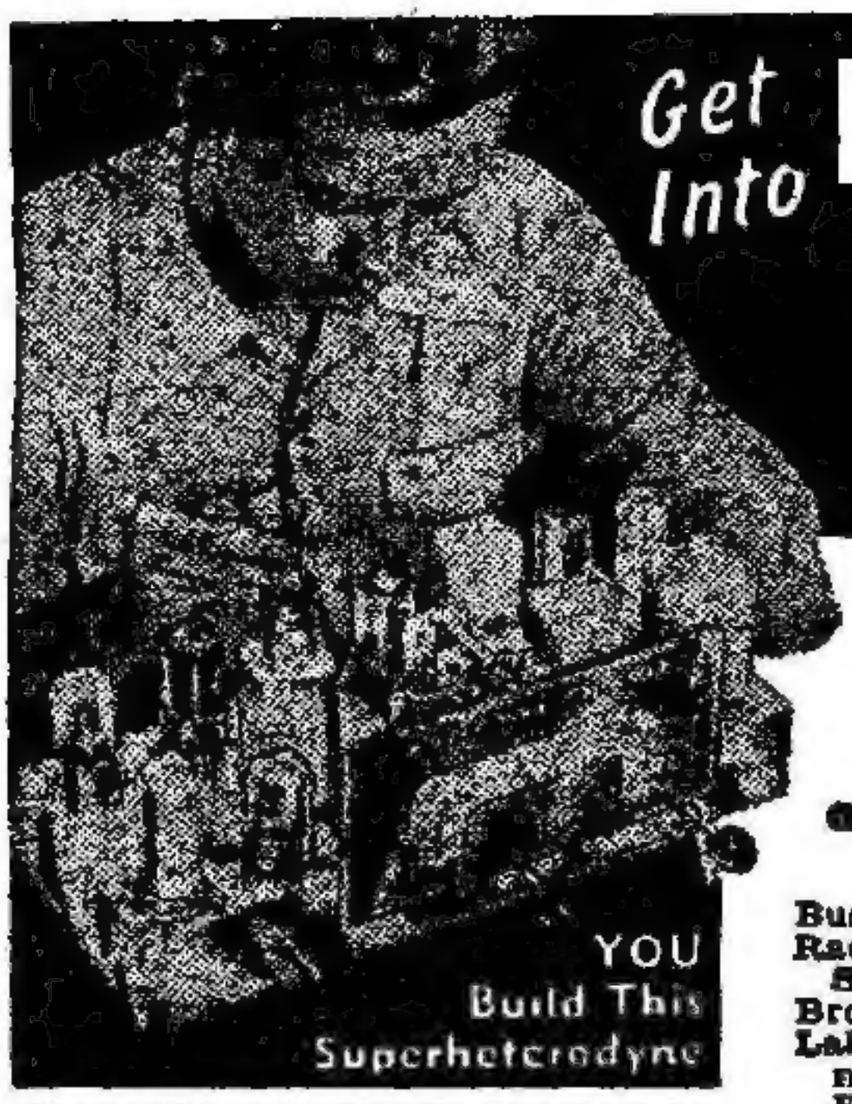
Yet in these stories of before all this you will find all of these developments present—though perhaps not by the names and exact forms that we have come to know them. Man has dreamed of the stars too long to have impending space-flight mark any sudden shift in his vision now that he has space travel almost within his grasp. H. G. Wells gave us the A-bomb in action in THE WORLD SET FREE back in 1914. And "wonder drugs" were no novelty in the years before World War II. In science fiction they were already here.

It is our belief that you will find that the scientific premises in the bulk of these stories are as modern as the day after tomorrow—even though the stories themselves come from the day before yesterday.

OUR NEXT ISSUE

HEADLINING the second appearance of FANTASTIC STORY QUARTERLY will be one of the truly epochal science fiction novels of all time, Richard Vaughan's THE EXILE OF THE SKIES. This is a tale of cosmic greatness, of romance

(Continued on page 161)



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- Experiments with resonance
- Producing beat frequencies
- Calibrating oscillators
- Experiments with diode, grid-bias, grid lead and infinite impedance detectors
- Practical experience in receiver trouble shooting
- Application of visual tester in checking parts and circuits
- Experiments with audio oscillators
- Advance trouble-shooting
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AND THEN JEFF SPRUNG THE TRAP...

WHAT GOES?

NEVER MIND THE QUESTIONS. CAST OFF AND LET'S GET OUT OF HERE!

TIED UP TO A LONELY DOCK IN A SMALL SOUTHERN BAY, JEFF BELL, "TROPICAL TRAMP," IS SPENDING A QUIET EVENING ABOARD HIS BATTERED LAUNCH, WHEN...

TWO HOURS LATER

SOMEBODY MESSED UP MY ENGINE. HEAD FOR THAT LIGHT

WHY DID YOU PICK ON MY TUB?

HURRY UP, YOU!

THESE THINGS ARE HEAVY

ONE MORE BOX, PETE

HEAVE TO!

SO! IT WAS A PLANT! DUMP THOSE PLATES!

HOLD IT! I'M TAKING OVER NOW!

LATER

TRAP WORKED. COUNTERFEITERS LED ME TO CACHE. BOTH CAPTURED, ALONG WITH PLATES. BELL

I'LL BE GLAD TO SHED THIS BEACHCOMBER RIG. CAN I CLEAN UP HERE?

HERE'S MY RAZOR AND SOME SHORE CLOTHES

WONDERFUL BLADE YOU'VE GOT HERE!! CAN'T RECALL A SMOOTHER, EASIER SHAVE!

THIN GILLETTES GO OVER BIG ON THIS SHIP. THEY'RE PLENTY KEEN

WHO'S THE GOOD-LOOKING CIVILIAN?

JEFF BELL, CLEVEREST AGENT IN THE SERVICE. I HEAR HE'S IN LINE FOR THE CHIEF'S JOB

FOR QUICK, CLEAN, GOOD-LOOKING SHAVES ... AND MORE OF 'EM PER BLADE ... **USE THIN GILLETTES.** THESE BLADES ARE BY FAR THE KEENEST AND LONGEST-LASTING IN ALL THE LOW-PRICED FIELD. PRECISION MADE TO FIT YOUR GILLETTE RAZOR EXACTLY, THIN GILLETTES PROTECT YOUR FACE AGAINST NICKS AND IRRITATION. **ASK FOR THIN GILLETTES IN THE ECONOMICAL 10-BLADE PACKAGE**

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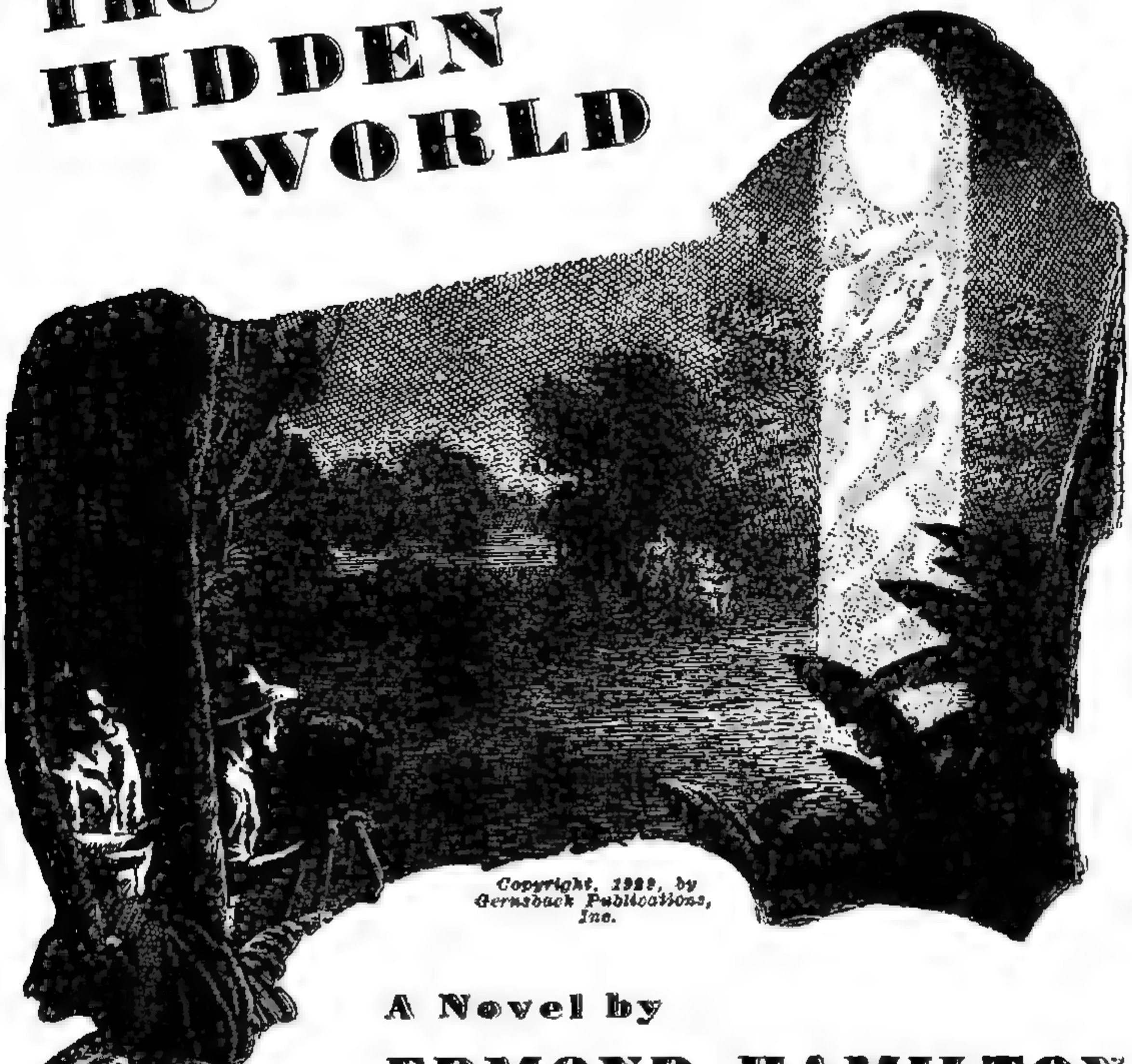
Arnold Vance and three other scientists seek to outguess a baffling phenomenon, and find themselves prisoners of an Earth within Earth!

The HIDDEN WORLD



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There was a terrific beam of light (CHAP. II)

A Novel by

EDMOND HAMILTON

CHAPTER I

Blue Lights

IT IS with a strange wonder that we remember the dark menace that rose upon us from the hidden world—and how it ended. Nor have I, Arnold Vance, any less of wonder than those about me, for all that I saw that they did not, for all that I stood where never men had stood before at the heart of that dread mystery and menace.

Facing Inevitable Doom, Flesh-Creatures Set

Four men only were there at the end, though a reeling world bore witness to it when it came. Four men—Dr. Howard Kelsall, Clifton Darrell, Richard Fenton and myself—dared down into horrors undreamed of by all earth's generations, alone penetrated into that greater horror that was rising upon the unsuspecting earth.

The first and eldest, Dr. Howard Kelsall, held at that time the post of chief geologist of the great Manson Foundation in New York. It was a much-coveted position but Kelsall was conceded by all to have merited it.

It is unnecessary for me to recapitulate here the achievements that had established his reputation—his great "double-buckling" theory of the formation of the Rocky and

A number of those strange fleshless things held within their tentacled grasp small cubes — cubes which, I could tell, held those terrible, yellow rays (CHAP. III)

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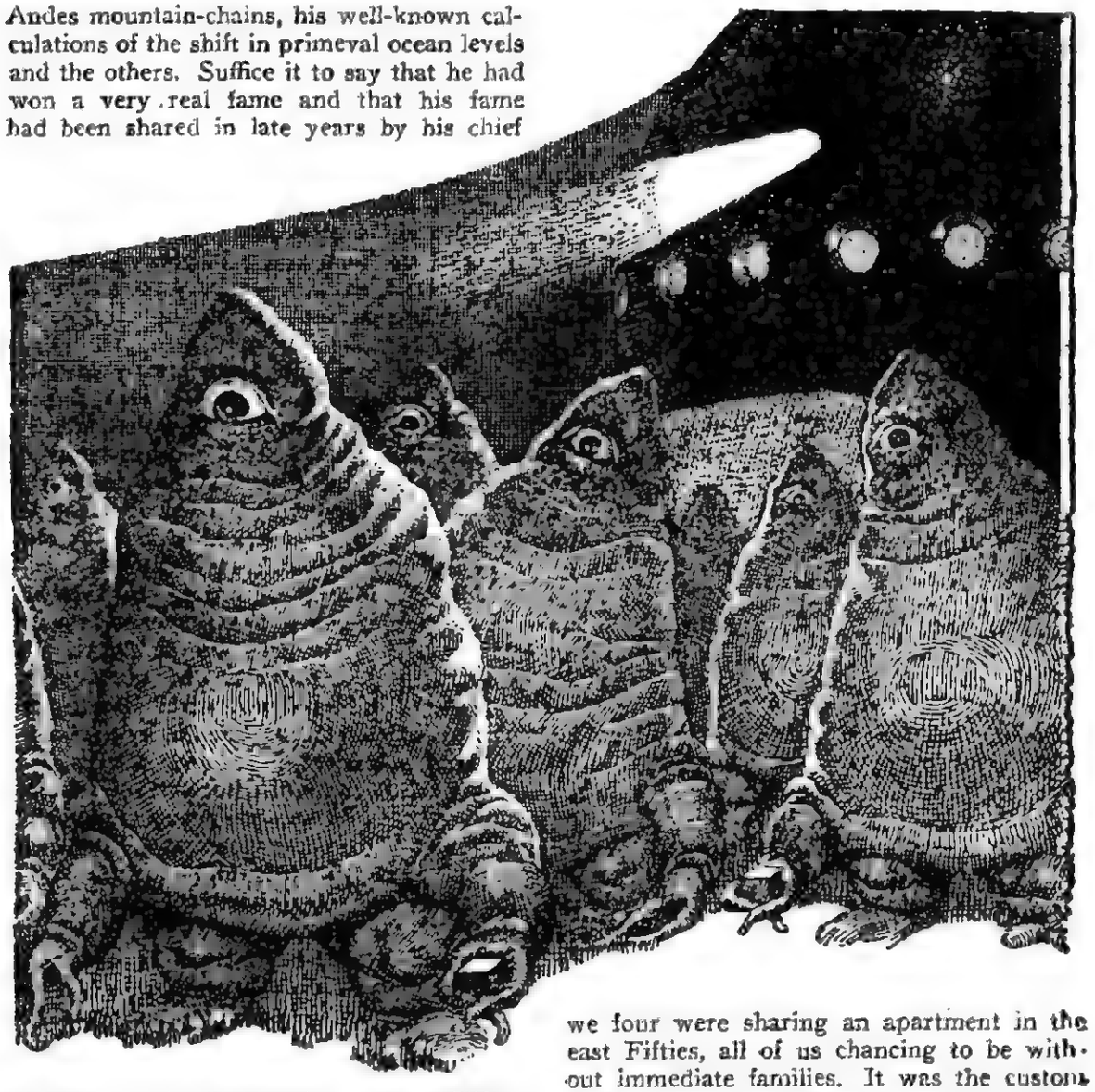
Their Plans for the Destruction of Mankind!

Andes mountain-chains, his well-known calculations of the shift in primeval ocean levels and the others. Suffice it to say that he had won a very real fame and that his fame had been shared in late years by his chief

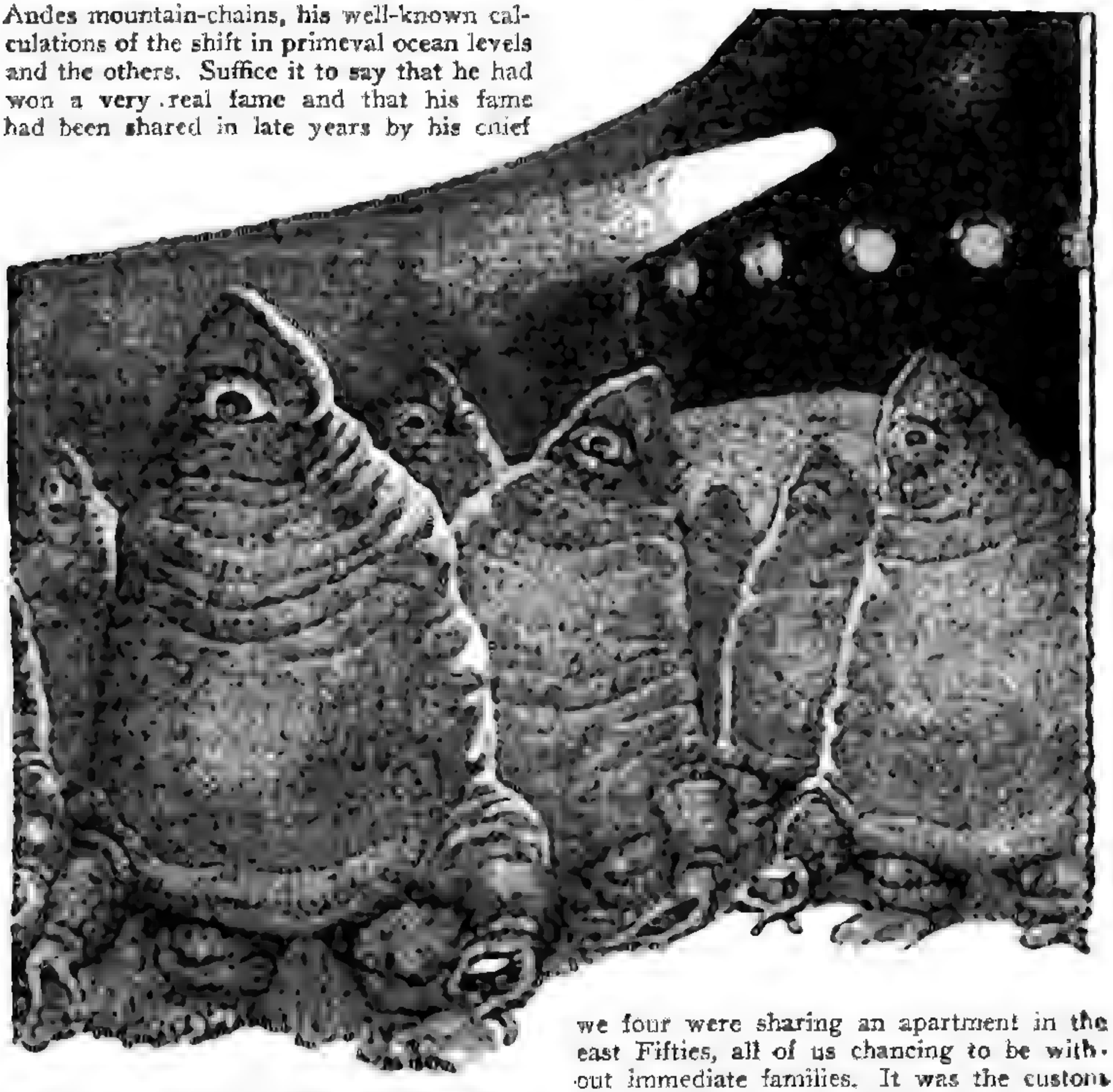


assistant at the Foundation, young Clifton Darrell.

Kelsall and Darrell, though the one was of middle-age and the other in his twenties, were strong friends, and their friendship had come to be shared also by Richard Fenton and myself, two of the Foundation's younger physicists. An unusual quartet of friends we made, but one which was bound strongly together.

At the time when the manifestations from the hidden world began, the time of the appearance of the first light-shaft at Kismaya, we four were sharing an apartment in the east Fifties, all of us chancing to be without immediate families. It was the custom of Dr. Kelsall and myself to walk from this apartment each morning to the Foundation building, the other two preferring the subway.

And it was at the end of one of these walks, on a morning late in March, that the first news of the appearance of the light-shafts was given to me by Dr. Kelsall himself. We were passing up the steps of the great gray Foundation building on that morning when he paused and pulled from his pocket a folded newspaper, which he tendered me.



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"I forgot until now to show you this, Vance," he remarked, directing my attention to a small article on the folded paper's side. "A strange occurrence—strange, that is, if it isn't the work of some reporter's imagination."

I took the paper and we paused there at the top of the steps as I read the little article. It was but a few inches in length, a cable dispatch dated from the little coast town of Kismaya, lying in British East Africa, just south of the equator. The dispatch stated that a strange manifestation of light or force of some kind had stricken with panic the entire population of a native village some miles to the north, on the preceding night.

In this village, which, incidentally, lay almost exactly upon the line of the equator, there had been on that night two white traders also, who vouched for the truth of the surprising though somewhat incomprehensible story which the terror-stricken natives told.

According to that story it had been but a few hours before midnight, at the edge of the assemblage of huts that were their habitations. There had been no sound, no warning. A brilliant shaft of blinding blue light had abruptly stabbed upward from the earth at the village's edge to a height of fifty feet.

This light-shaft, they said, had been perhaps five feet in diameter and near the top had been set in its blinding blue light an equally dazzling spot or circular portion of pure white light. For perhaps two minutes the giant light-shaft had towered there, the terror-stunned natives near it frozen in fear.

In those moments they had been able to see from the circle of white light in its side, near the top, that the brilliant shaft was turning, slowly turning around and around. Then suddenly it had sunk and vanished, the ground where it had appeared seeming quite unchanged by its apparition, which sent all in the fear-stricken village racing from it.

The thing was puzzling enough surely, and as I handed the paper back to Dr. Kelsall I shook my head. "It's past me," I told him. "Sounds like the work of the reportorial imagination you mentioned."

He nodded thoughtfully. "Perhaps so, Vance," he said. "Though the story was corroborated by the white men and the evidence seems quite circumstantial."

APPARENTLY the casual verdict which I rendered upon that first dispatch was the one given also by the world at large, for in the days that followed no further reference to the thing appeared in the newspapers. Such strange phenomena, indeed, are not unfamiliar among the dispatches of the great press services, the greater part of them being hoaxes of one kind or another, so it is not surprising that this particular incident evoked no further interest.

I know that I had completely forgotten it by the next day and Dr. Kelsall made no reference to it in the days that followed. It was not, indeed, until the appearance in the press of the dispatch from Moram Island, some twenty days later, that the first Kismaya affair was jerked back to my memory and to those of many others.

Moram Island, according to this new dispatch, was one of the innumerable islands lying off the western tip of Dutch New Guinea, a few miles to the north of the equator. Besides a number of Dutch planters and officials it was occupied by the brown-skinned islanders who had always lived there and it was from planters and islanders alike that this second report now came. The gist of the thing was that, a little before morning on the preceding day, a terrific beam of light had been seen on the sea south of the island.

It had seemed miles to the south indeed, so far that it must have been almost exactly over the equator itself. A great perpendicular shaft of intense blue brilliance, it had shot up from the waters southward like a great beacon through the night, had hovered a minute or two, and then had flashed down and out of sight.

The awed watchers on Moram Island had thought it at first the beam of some ship's searchlight. But the coming of dawn a little later had disclosed no craft whatever to the southward, making the thing seem quite inexplicable.

In itself, no doubt, this second phenomenon would have aroused but little comment but the earlier and similar occurrence at Kismaya now made of this second incident something of more interest. Scientists,

when questioned concerning it, agreed in attributing the two great light-flashes to falling meteors.

They doubted whether the flashes had really lasted for minutes as reported and refused to take seriously the details concerning the turning shaft of blue light and the white circle of light upon it that had been reported from Kismaya. A meteor-flash, as they pointed out, is almost instantaneous though very brilliant.

The fact that no meteor had struck the ground at Kismaya they attributed to the burning-up of the meteor and its total annihilation as it flashed downward. The second surprising fact that both flashes had taken place almost exactly upon the equator they explained by the assumption that the earth was entering a thin belt or region of meteors which happened to lie in the same plane with our planet's equator.

This theory, as they pointed out, meant that more meteor-flashes might be expected in the equatorial regions and though the theory had its defects it was certainly the most plausible advanced. It was true that the great steady shafts of brilliance that had been described by the witnesses at Kismaya and at Moram Island were very different from a meteor's lightning flash downward.

But that could be accounted for by the excitement of the witnesses, so that the whole matter seemed satisfactorily explained. Dr. Kelsall, to whom I knew this second incident would be of interest, was on a short field-trip to the Adirondacks, so that at that time I had no opportunities of discussing it with him and had forgotten it by the time that he returned.

Three weeks after that second phenomenon though, the matter was brought forcibly back to my mind and to the world's by the *Callarnia* incident. The *Callarnia* was one of those giant cruise-ships designed to transport a thousand passengers in utmost luxury about the world and at the time of the incident was heading homeward over the central Pacific from such a globe-circling cruise.

It had ventured in the past months through the Atlantic and the Mediterranean, through the Indian and the Pacific Oceans. As that day closed it was heading east-northeastward toward Panama on the last lap of its trip, its position some five hundred miles north of the Marquesas with the equator a little north of the ship.

As the sunset of that day flared westward the great ship's passengers had gathered upon its boat-deck, where a group of queerly-garbed sailors were preparing to perform the ancient nautical ceremonies that were considered proper to "crossing the line."

By the time twilight had come, the ceremonies were already going on amid the shouts and laughter of passengers and crew alike, the exact line of the equator lying at that time a little toward the north, the ship forging slowly and obliquely toward it.

It happened, therefore, as the dim dusk thickened, intent upon the clowning of the group before them, passengers and sailors alike had no thought of the thing that was to come. No thought until, in another moment, the thing was upon them.

A half-mile ahead of the ship there stabbed suddenly upward through the deepening twilight a shaft of dazzling blue radiance that seemed to spring up from the sea itself, that hung at a height of fifty feet, slowly turning. Near its top was a circle of pure white light by which that turning could be marked.

In that first stunned instant as the passengers and sailors, in answer to a wild cry, gazed toward the blinding shaft, it seemed to them that that shaft extended down to depths inconceivable in the waters themselves, glimmering faintly through them.

For a minute, a minute that seemed an eternity to them, the giant beam slowly turned there. Then as abruptly as it had appeared, it snapped down and out of existence, leaving those on the great ship staring at each other, white-faced in the darkening dusk.

SUCH was the tale the great cruise-liner's radio sent sputtering forth. It appeared within hours in the New York journals. This, the third of these strange incidents, aroused for a short time at least an interest which the first two had failed to evoke.

Again the thing had happened, and upon earth's equator as in the first two instances! The matter seemed to many startling for that reason but the scientific authorities questioned concerning it only boredly re-

ferred their questioners to their earlier statements.

The thing, they said, was but another instance of meteor-fall as had been the first two. Happening at the equator it confirmed their theory that the earth's equatorial regions were in the plane of a thin meteor-belt through which the earth was passing.

The statements of those on the *Callarnia* to the effect that the great blue shaft of light had remained for a full minute or two, and had slowly turned with its white circle of light upon it, the scientists discredited.

For, as they explained, a meteor's brilliant flash, caused by its burning up before it can reach earth's surface, often is so intense as to impress the visual nerves with a sense of duration for longer than is really the case.

This explanation, reasonable enough, was concurred in by those newspapers which made independent comment on the strange triple incident. Desirous as they were of a sensation, they were aware that the flashing out of three brilliant light-shafts on three far regions of earth's surface was of but little intrinsic interest to their readers, save for a few of the more scientifically inclined.

For a day or so they published what comments they could gather on the *Callarnia* incident but the very lack of further developments made it soon of no more interest to them. And so, quickly enough, this third strange phenomenon was forgotten by newspapers and readers as had been the first and second.

My own interest had been definitely caught by the strange recurrence of the phenomenon and I resolved to discuss it with Dr. Kelsall, who had shown such interest in its first happening. When I reached our apartment that evening, I found that Dr. Kelsall had not yet arrived from the Foundation, nor was he there when Darrell and Fenton and I returned home after dinner.

It was natural enough, however, that this subject uppermost in my mind just then should have entered our conversation and we were engaged in a discussion of it when Dr. Kelsall finally entered. I apprised him, briefly, of the subject of our talk. To my surprise, when I had done so, he ventured no suggestion on the thing, but sat beside us in silence.

Gazing out beyond us as we watched him in silence for the moment, his strong face and keen steel-gray eyes brooding upon something, he sat there for moments unspeaking before turning finally toward us.

"Darrell—Fenton—Vance," he said, his eyes moving over us. "It's about this thing that I wanted to talk to you tonight."

"These three light-shafts?" asked Darrell and Kelsall nodded.

"Yes," he said, "these three great light-shafts that have flashed into being, one after another, at three different spots around earth's equator. And what in your opinion caused the light-shafts to appear? Meteors?"

Darrell shook his head. "No, that's what we were discussing when you came in, Kelsall, and we decided that they couldn't be meteor-flashes. For all who saw them say that they were great beams or shafts of light instead of flashes and no meteors were seen or heard. Yet what could have caused them?"

"I do not know," Kelsall said quietly. "But one thing I do know, a thing that none other on earth has guessed. I know where and when the next of these enigmatic light-shafts will come and I propose that we four go there and solve the mystery when it does appear!"

ASTOUNDED, we stared toward him. But before we could ask him a question of the many that whirled in our brains he had turned and taken the small globe from the table beside him, had turned back to us and was speaking quietly on.

"Before you can understand the thing I have discovered," he said, "you must understand the locations in which these three strange light-shafts have appeared on earth. As you know the first light-shaft appeared just north of Kismaya in British East Africa, just on the equator, on the night of March 22nd, two and one-half hours before midnight.

"The second—" he spun the globe a little—"appeared here on the equator, just south of Moram Island off New Guinea. Both light-shafts, as you know, appeared almost exactly upon earth's equator. But there is a stranger thing that no one else noticed—and that is that the second light-shaft appeared just one-fourth around earth's equator from the first!"

"Strange, is it not? Yet here is some-

thing as strange. At this dot I mark on the blue of the Pacific is the latitude and longitude reported by the *Callarnia* on the evening that the third light-shaft appeared before it. That dot, the position of the third light-shaft, is exactly another fourth round earth's equator from the position of the second light-shaft, exactly a half around earth's equator from the first!

"In other words these mysterious shafts of brilliant blue light have flashed into being in a regular progression around earth's equator, each appearing exactly upon that equator, each appearing exactly a fourth around earth's circumference from the last!

"That being so, can it be doubted that when the fourth light-shaft appears it will occur in the same regular progression, at a spot another fourth around earth's equator from the third? Thus one has only to measure with accurate maps from the position of the third light-shaft, a fourth around earth's equator, to find the spot where the next light-shaft will show!

"And that is what I have done today. Doing so I found that spot. It lies in the Brazilian jungle just north of the Amazon River's mouth, lying between two little-known rivers, the Malgre and the Taurauma, which join each other exactly at the equator. It is upon the ground between those two joining rivers there in the Brazilian jungle

that the next of these strange light-shafts will undoubtedly appear!

"But, you will say, when will it appear? Well, if you will reread the accounts of the three light-shafts you will discover that they were separated by as regular intervals of time as of space. Exactly twenty days, six and a half hours elapsed between the appearance of the first light-shaft at Kismaya and the second at Moram Island.

"The same exact interval of twenty days, six and a half hours elapsed between the Moram Island appearance and the sighting of the third light-shaft by the *Callarnia*. With this regular progression in mind therefore, it cannot be doubted that the same interval will separate the appearance of the third and fourth light-shafts if a fourth appears.

"So that we can say almost positively that if a fourth shaft does appear it will do so twenty days, six and a half hours from the last, which sets as the time of its appearance a half-hour before midnight on the night of May twenty-first, more than two weeks from now. And I propose that we four be there when it does.

"We alone of all men know where and when it will appear, if it does appear, and we shall endeavor to penetrate the mystery. And mystery it is. For whence come these shafts of brilliance, which could not have been made by any known device of men, yet have appeared around earth's equator with human and more than human exactness and regularity of time and place? What is their cause, their purpose?

"To us four is given the chance to solve these questions. In their solution we may penetrate mysteries and forces as yet undreamed of by any on earth. You, Darrell and Fenton and Vance—will you not go?"

There was a moment's silence at his final question, silence in which, with minds awhirl, we gazed at him and at each other. Then suddenly, as our eyes met, we knew without words each other's thought and Darrell turned to Kelsall, speaking for all of us.

"We're with you, Kelsall," he said quietly. "Whatever mystery lies behind these light-shafts, we're going with you to solve it."

CHAPTER II

The Spheres from Below

A HALF-HOUR before midnight on May twenty-first the fourth light-shaft should appear—and that's just six hours from now!"

It was Dr. Kelsall who spoke and as he replaced in his pocket the watch at which he had been glancing we four turned for the moment from each other, gazing about us.

Around us there stretched away in all directions the vast green solitude of the Brazilian jungle, a tremendous solid mass of vegetation that seemed to lie like a great blanket over the earth.

The great close-packed trees, the thick vines and lianas that bound them everywhere together, the impenetrable plant-life that choked the lower ways between them, swarming with brilliant-hued birds and monkeys and strange insects, with larger animals stirring beneath—these extended out from us on all sides, lit now by the waning glory of the sunset to the west. The whole scene about us impressed one most with the illimitable fecundity of the life, plant and animal, with which it swarmed. It was a fecundity of life so dissociated from anything human that it was strangely depressing.

We four, however, were standing upon an island in that ocean of green thick life—a long triangular-shaped clearing of brown earth and sand, which was bounded on two sides by the broad ochre floods of two swift-running rivers, the Malgre and the Tauraurua. These flowed together at the point of our long triangle-clearing, continuing on their course as one to the great Amazon away to the south.

It was somewhere on or near this triangle of land between the two rivers, according to Kelsall's calculations, that the fourth of the strange light-shafts would appear if it appeared at all. So it was toward one side of the triangle, along the Malgre's shore, that our brown tropical-tents were pitched, our long river-skiff moored beside them.

It was in that long sturdy craft and by virtue of its strong little motor that we had made our way up the Malgre to this point where the Tauraurua flowed into it. The swift airliner we had managed to catch had brought us from New York to Para in less than two days.

Then, procuring the stout river-skiff that was large enough to hold us and all our equipment and apparatus, we had proceeded up the Amazon by river-steamer to the point where the Malgre flowed into it. There, leaving the steamer, we had begun the most toilsome part of our journey, the slow fight upward against the Malgre's

current through jungles that stretched to the north to and over the Guianas, jungles swarming with animal life, their only human inhabitants a few half-glimpsed brown Indians.

It was the great wilderness of the Brazilian Guiana into which we were penetrating. So toilsome was our progress that had our goal been but little farther we could never have made it before the calculated time.

As it was it was only on the preceding day that we had reached this triangle of clear land. Until the present moment we had been busy in arranging apparatus, which had given us anxious moments in our rough journey upward in the skiff, for much of it was of a super-sensitive and delicate nature.

There were black-cased cameras, cinema and still types, some equipped with various ray-filters and screens. Square fluoroscopes lay ready beside the delicate galvanometer circuits and electroscopes that had been set up by Fenton and myself.

If a fourth great light-shaft appeared near us it would be strange if we four, with the comprehensive equipment which we had set up, would not be able to record the shaft's appearance. We should be able to determine, even though it lasted but a minute or two like the others, its nature, whether electrical or radio-active or simply light.

We were ready indeed for the coming of the fourth light-shaft, yet now as we four stood there, brown-garbed, white-helmeted figures with heavy automatics swinging always at our hips, it was with oppressive doubt that I gazed about me. The whole vast wild scene about us filled me with misgivings.

Had we come after all on a wild-goose chase? Had the appearance of those three light-shafts been due only to some freak of natural forces, the regular progression in time and space of a mere coincidence? Had Kelsall been far afield in his belief that here where we stood another light-shaft would appear within a few hours?

These were the questions that troubled me as we stood there together, watching in silence as the sunset westward flared and faded. At last, turning to the others, I expressed some of my doubts.

"The whole thing seems incredible, doesn't it?" I asked. "Incredible for us to expect a fourth light-shaft to appear at this exact spot."

I indicated with a wave of my hand the thick walls of jungle that rose around our river-bordered clearing and Darrell and Fenton gazed silently around at my gesture.

Kelsall, though, shook his head. "No, Vance," he said. "If a fourth light-shaft appears it will do so here and at a half-hour before midnight. I'm certain of that—for the appearance of the other three have been superhumanly exact in time and place."

"But there's nothing unusual here," I said. "We've explored this clearing and the region immediately around it and we've found nothing unusual—no sign of the presence of human life even."

"There was nothing strange or unusual at Kismaya, or south of Moram Island, or before the *Callarnia,*" Kelsall reminded me. "Yet the light-shafts appeared there. And though no other humans lie within leagues of us I think that there is nothing human behind the mystery of these light-shafts which we have come here to solve."

"But our plan of action?" questioned Darrell. "In case the fourth light-shaft does appear it will last only for seconds and we'll need to be quick if we're to gather any data on it in that time."

KELSALL nodded. "Yes, Darrell, and for that reason we'll take up separate stations when the time approaches. I want you and Vance here to take up a position at the north or broad end of this triangular clearing, just at the jungle's edge.

"You will hold the two cameras, ready to turn them upon whatever spot the fourth shaft appears if it does appear. Vance, who like Fenton is a physicist and understands such work better than we, can use the fluoroscopes to determine whether the shaft is fluorescent in nature.

"Fenton and I, on the other hand, will station ourselves down at the clearing's point on the open sand. There Fenton can watch his electroscope and galvanometer circuits while I use the spectrograph on the light-shaft.

"In this way if the light-shaft appears in this vicinity as it should, even though it lasts for but a minute, we should be able to determine accurately its nature and gain enough data to enable us later to discover its cause."

"You have no theory yourself as to that cause, then, Kelsall?" asked Fenton curiously. "You've never ventured any to us but you must have some thought concerning it."

Kelsall's face grew grave at the question. "I have a theory," he said slowly, "but not one I want to mention now. It is a theory which to my mind can alone account for the appearance of these strange shafts of light. Yet it is so startling, so insane, that even you could not take it seriously now.

"But if another light-shaft appears here, if we cannot discover its nature, it may be that the thing that has suggested itself to me will be corroborated by our evidence. And if that is so—"

He did not finish but as Darrell and Fenton and I stood there beside him, regarding him, something of the strange suspense that held him was communicated to ourselves. So it was in silence that we stood there, while the last colors of the sunset faded westward, while the deep tropical twilight stole westward across the world like a veil drawn after the descending sun.

Swiftly then the darkness of night, soft and velvet, was upon us with the brilliant constellations of the equatorial sky burning out brightly overhead, with a strange tremor and stir of renewed and re-awakened nocturnal life. Soon now would be upon us also the moment for which we had trailed to this spot. We began to follow Kelsall's orders, to arrange ourselves and our masses of apparatus about the long clearing.

At the long triangular clearing's northern end, its broad base in effect, Darrell and I quickly set up our cameras and fluoroscopes, just at the edge of the thick wall of the jungle. That base or side of our triangular clearing was perhaps three-quarters of a mile in width and from it the clear triangle of ground stretched southward, bordered on either side by the two swift rivers, to the long sandy point where they converged.

It was upon this tip that Kelsall and Fenton, in turn, set up their own apparatus, their spectrographs and electrical apparatus, Darrell and I helping them and working without hamper in the clear thin starlight that lit all the clearing. This done, the four of us met again for the moment at the clearing's center before taking up our positions.

Kelsall clasped the hands of Darrell and myself strongly. "Darrell—Vance," he said, "I know that you will do your best on this. Be ready and if the light-shaft does appear anywhere within sight of us get your instruments on it at once."

Darrell nodded, raising his hands for the moment to the shoulders of Kelsall and Fenton. "We'll be ready for it," he said. "And if nothing happens—well, we'll have done our best."

With these words we turned and then the four of us had separated, Darrell and I striding toward the clearing's nothern jungle-wall, where our instruments lay ready, while Kelsall and Fenton started for the sandy tip that was to be their position.

We had retained our heavy pistols, the profusion of fierce wild life in the jungles about us making that a necessary precaution. We crouched down among our instruments. Our last preparations had been made and our wait for the appearance of the fourth light-shaft began.

A glance at my watch showed me that there remained still more than two hours before the coming of the moment, a half-hour before midnight, which Kelsall had calculated as the time of the next shaft's appearance. We had begun our watch thus early at his own suggestion, in case his calculations might have been a little inaccurate.

WE WAITED in silence. Far down at the clearing's tip we could make out in the starlight, the vague shapes of Kelsall and Fenton, crouched likewise with their own equipment, and as silent as ourselves.

I found myself listening to all the myriad strange sounds that came from the thick jungle behind us, the distant coughing snorts or dull trampling sounds of large animals, the shrill sounds of countless insects, the occasional swashing of large lizards or reptiles in the rivers to east and west.

The sullen heat of the day, the burning heat of the equator, had declined only a little with the coming of darkness. And as the minutes dragged past with no other sight or sound save those of the profusion of jungle life about us, as the great tropical constellations sloped majestically across the sky, to my physical discomfort was added the return of my troubled doubts.

IT SEEMED to me incredible that we four should have found reason enough in the facts Kelsall had discovered to bring us to this wild spot in anticipation of witnessing a repetition of the three phenomena that had already occurred. It seemed insane for us to expect a fourth of the strange light-shafts to appear at exactly this spot, at the exact time that he had calculated.

And as that time slowly approached, as my watch's hands steadily approached the position that would mark the half-hour before midnight—as no slightest unusual sight or sound came from anywhere about us—I felt my doubt becoming stronger and stronger.

With watch in palm, I watched the larger hand slowly moving toward the half-hour position. Only minutes remained until our calculated moment would arrive. Slowly, minute by minute, the hand moved, was within a half-dozen minutes of the half-hour, yet from about us had come nothing new.

Now it was within four minutes, three, two, one. Tensely Darrell and I were watching it. The hand moved at last within a single minute of the awaited moment. Our hands were clenched unconsciously with suspense.

Then at last, with infinite slowness, the hand moved to the half-hour position. Our nerves taut with suspense, our hands ready on the instruments before us, Darrell and I waited, gazing about us, gazing at—nothing! No single gleam of light had appeared in that moment in all the dark mass of the jungle about us and behind us, no light-shaft or sign of one!

Gazing for the moment at each other, sick with disappointment, Darrell and I rose to our feet while down at the clearing's tip we saw Kelsall and Fenton rising even as we did. We had failed. Our plan, by which we had thought to solve the mystery of these strange light-shafts, had proved futile after all.

I took ~~a step~~ forward to go down to Kelsall and Fenton, disappointment wrenching at my heart. A single step I took and then, abruptly, I halted in my tracks. At the same moment a hoarse cry burst from Darrell behind me.

There before us, at the center of our great triangular clearing, half-way between ourselves and our two friends, there stabbed suddenly upward a terrific beam of brilliant blue light whose dazzling intensity seemed blinding to my eyes!

Fifty feet upward from the clear ground of the clearing it towered, a tenth of that in diameter.

Even as I shrank back from its soundless appearance, even as I heard the cries of Darrell and Kelsall and Fenton, I saw that near the shaft's top, set in some strange way, a circle or disk of pure white light, as brilliant as that about it! As it appeared I could see by the inset white spot of light that the great dazzling column was slowly turning as it towered there, turning like a solid revolving shaft!

In the single instant of the beam's appearance I glimpsed these things, then leaped back to the black fluoroscopes which in the next moment I trained upon the shaft. Beside me I heard the rapid clicking of Darrell's cameras, knew that even at that same instant Kelsall and Fenton would be working with their own instruments.

Because they were a modern recording development of the oldtime visual fluoroscopes I knew that if the light before us was of a fluorescent nature that fact would be recorded instantly upon their screens. So I swiftly exposed them, one after another, to the great towering shaft of blue brilliance that loomed before us.

Surely that scene must have been one of infinite strangeness—the tropic night all about us, the awful giant beam towering there so strange and terrible, the figures of us four to north and south of it, standing out like all things about us in its blue glare, and working like madmen with our instruments to record all available data.

Around and around the thing turned for more than a minute, the white-light spot upon its blue brilliant column moving with each turn. But the minute seemed to us drawn into hours. Then abruptly, as strangely and swiftly as it had appeared, it seemed to flash downward, to vanish like an extinguished light.

We were left there in a darkness that seemed deeper than before!

"It came—as Kelsall thought—but in God's name, man, what can it be?"

"Whatever it is we've got our data!" said Darrell. "And there come Kelsall and Fenton now—"

KELSALL and Fenton had risen and were striding excitedly toward us, calling to us in answer to our own shouts as Darrell and I strode to meet them. They were within a few hundred yards of us when a thing happened the mere memory of which sickens me to this day.

In one lightning instant the thing happened. There was a gigantic stabbing flash of yellow light that flared for a moment blindingly before us. At the same instant there broke from about us a titanic thunderous detonation that was like the crash of colliding planets!

Slammed down against the ground by that terrific detonation, we were aware in that instant of only the stunning light and sound loosed before us and then the thing was over, an almost thunderous silence following. But before us now, between our two groups, there yawned in the clearing's surface the black mouth of a great shaft or well, five hundred feet in diameter at least and perfectly circular in shape!

As Darrell and I staggered to our feet at its edge and stared downward into it, even as Kelsall and Fenton were staring tremblingly down on its other side, we saw by the starlight which fell into it that the great shaft dropped down to depths inconceivable.

Mechanically, unthinkingly, we stared down into the great shaft, noting only that it was as perfectly cylindrical in shape as though bored by a giant drill, that its smooth sides, cut unerringly through rock and soil alike, fell vertically downward to a point where even the white starlight from above could not illumine the tenebrous depths! Then, as we stood there, I cried out inarticulately, pointed downward.

In the awful blackness of the great shaft's depths a tiny point of white light had appeared, was growing larger! Even as we gazed toward it we glimpsed other light-points appearing beside and around it, other little white lights there far, inconceivably far, beneath, growing larger with each second as at immense speed they rushed up toward us!

Growing larger until in moments more, as we gazed, we could see that the white lights were flashing upward from dark round objects that were racing up the shaft toward us! And in the next moment we recognized them as great metal spheres!

Each a full twenty-five feet in diameter, massed together in a swarm of a full hundred or more, they were rocketing up the shaft toward us! From each of them flashed a white beam of brilliant light by means of which they held their course straight upward through the great shaft!

Racing up toward us at speed unthinkable—and as they shot up with a humming sound, there came to my stunned ears a wild cry from Kelsall, standing there across the great shaft's rim from ourselves.

"Spheres!" he was crying madly. "Sphere-ships from inside the earth! Darrell—Vance—I see it all now. Get back, for God's sake, get back from the shaft!"

CHAPTER III

The Things of Flesh!

THE NEXT moment, as Kelsall's wild cry echoed in our ears, I was aware only of Darrell beside me, jerking me back, and of a wild nightmare rush toward the wall of the jungle north of us which we had left a few minutes before! I glanced back for one instant, glimpsed Kelsall and Fenton running back from the great shaft, running back toward the clearing's tip.

Darrell and I, almost to the jungle's dark mass, flung ourselves toward it with one last effort. As we did so I heard a sudden humming in the air behind us. Then, even at the moment that we hurled ourselves inside the jungle's thick cover, I half-turned and saw the swarming metal spheres, their white beams flashing still, emerging from the shaft into the open air!

The next instant their great swarm or mass was halting, hanging there above the shaft, their beams of light stabbing and circling swiftly in all directions through the night, questing and searching. Crouched there in the thick undergrowth behind the trunk of a great tree, we realized that our bolt to the jungle's protection had saved us, for they had apparently not glimpsed us.

But as we crouched there I glimpsed Kelsall and Fenton, still running toward the clearing's tip over its bare surface. Then

dozens of the circling beams caught the two men in their illumination and as they did so scores of the hovering spheres leaped through the air toward them!

Instantly Darrell and I were on our feet, on the point of leaping back out from our cover. From the spheres stabbed other narrow beams, yellow instead of white. These yellow rays shot over and past our two friends, striking the ground just beyond them.

As they did so the earth where they struck was seemingly gouged by a giant invisible hand. A great crater was scooped suddenly from it where the rays struck and at the same instant there came to our ears a bursting detonation. As the ground before them vanished thus, seeming to disappear with the speed of light, Kelsall and Fenton halted, stunned. The yellow rays snapped out and the rushing spheres completely surrounded our two friends, came swiftly to the ground in a circle about them!

Darrell jerked me back down into our cover. "Wait, Vance!" he whispered tensely. "They haven't harmed Kelsall and Fenton yet—wait here and maybe we can save them!"

Down again into our sheltering undergrowths we crouched. Then, as we gazed forth, we could see by the clear starlight that the globes which had come to rest around our two stunned friends were more than a score in number. The remaining scores of the great spheres were hanging still over the great shaft.

As we watched with hearts hammering, we saw that in the metal spheres were transparent circles or windows. In those around Kelsall and Fenton round sections of the curved metal spheres like swinging doors opened. From the interior of the spheres emerged some scores of creatures, creatures at the sight of which Darrell and I clutched each other's arms with sudden fierce intensity.

For they were surely such creatures as men had never looked upon before. Each of them was a great white mass of flesh that seemed shapeless and sack-like, a mass fully seven feet in height and half that in width. The upper part of the flesh-mass tapered a little.

Each was upheld by two thick and equally shapeless lower limbs, half the thickness of the body they supported and hardly more than a foot in length. Just above these limbs, at the foot of the shapeless body-mass, there projected two equally short and thick upper limbs or arms, each ending in two tapering tentacles or feelers.

Above these grotesque arms towered the great white mass of the body itself and set in the upper part, directly in its white mass, were the only features visible, a single dark and saucerlike eye, inches across and circular in shape. Beneath it was a horizontal row of seven small round apertures which seemed to be the mouth.

Such were these things that moved out of the spheres toward the motionless Kelsall and Fenton, as horror-stricken as Darrell and myself. And as they moved I saw that it was only with great effort. Their strange thick limbs seemed to buckle and bend beneath them.

To all appearances they were quite boneless, which I was to learn later was the truth. Great things of flesh with no skeleton or bones of any kind within them, great head-

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ess things moving slowly, half-dragging themselves forward, out of their spheres toward our two friends!

I saw, even through the daze of horror that had settled upon me, that a number of them held within the tentacled grasp of their strange arms small cubes of the same metal as their spheres. I could comprehend by the carefulness with which they kept the cubes held toward Kelsall and Fenton that they held the same terrible yellow rays that we had seen gouge so swiftly and incomprehensibly that crater in the earth.

BUT we saw that the great flesh-things were regarding our friends fixedly with their great single staring eyes. Kelsall returned their stare, trembling a little, and I could see Fenton's hand steal down to the automatic at his hip, then move away from it as though he realized that to use it would mean certain death for Kelsall and himself.

Then from the foremost of the great flesh-things, who swayed with his efforts to hold his great weight erect upon his thick and boneless limbs, there came a strange succession of high whistling sounds, sounds that seemed to have their origin in the row of seven small openings beneath his eye.

It was as though the thing were expelling air through the openings to produce the whistling sounds, rising and falling swiftly in modulations which made it evident enough that the creature was speaking, speaking in his own strange way to our friends.

To that whistling speech, neither Kelsall or Fenton made reply, simply shaking their heads in a very evident gesture of lack of understanding which must have been read correctly by the creature before them. For a moment longer he contemplated them, then turned and directed for a brief moment his whistling speech at some of the other great flesh-things about him.

At once they moved forward with infinite effort, as though their great weight had been increased to a point where they could barely move it. Toward Kelsall and Fenton they moved and then, as we stared with hearts pounding from our cover, we saw them grasp our two friends and propel them toward the open door of one of the resting spheres!

As comprehension came to us, Darrell and I uttered low exclamations, at the same moment straightening and taking a step forward from our cover. In another moment we would have burst forth into the starlight of the clearing in a wild effort to rescue our two friends, regardless of the death that must have rewarded such an attempt.

But as we straightened, as Kelsall was marched toward the open sphere with his companion, I saw him gaze for the moment in our direction, a furtive glance to assure himself of our escape. And when his eyes discerned our two figures on the point of rushing out to him, we saw him make a swift and surreptitious gesture toward us, a gesture that as plainly as words warned us back!

A moment we stood irresolute in the face of that gesture, the attention of the flesh-things in the clearing upon our two friends. Then, as calmer second-thought came to us and made us recognize the hopelessness of such an attempt, we sank back into our cover.

Crouched there, with Darrell's hand gripping my shoulder tightly, we watched as Kelsall and Fenton were ordered inside the sphere before them. Then there followed them inside a number of the flesh-creatures, the door was closed and with a sudden hum of power the sphere and those resting about it rose upward.

The great metal globe that contained our two captured friends moved with a half-score others downward, into the great shaft with swiftly mounting speed and out of our sight. Whatever strange and unsuspected world within earth's depths these flesh-monsters had come from it was back down toward that world that Kelsall and Fenton had now been taken!

"Captured!" My whisper as we crouched there was one of hopeless despair.

"Steady, Vance," whispered Darrell beside me. "Our one chance to get Kelsall and Fenton free, is to keep from being discovered by these things now."

Darrell's caution to me came none too soon. For now, with the sphere holding our friends having disappeared down into the shaft, the great mass of spheres hanging above the clearing was moving again. Still more than a hundred in number, the humming of their operation sounding to our ears like the droning of a great bee-swarm, they were moving off in different directions, were taking up a new formation.

Their formation was one of a great ring, a ring that expanded until it formed a circle

perhaps a mile in diameter of which the shaft was the center. In that ring the hundred spheres moved slowly and steadily, one taking the place of the other so that they always held formation, circling slowly and smoothly over the jungles.

It was plain enough that these hundred circling spheres were guarding the shaft, were watching all the country directly around it for possible intruders, their white beams searching downward and outward as they hummed on in their ceaseless watch.

Three of the great spheres had separated from the others when they formed their circle and had descended to come to rest at equal distances from the great shaft's rim, one of them being on the side nearest ourselves.

As Darrell and I watched them intently, their round doors opened and from each, slowly and with great effort, emerged a half-dozen or more of the flesh-monsters, two or three of the things remaining in each sphere. These grouped together at the great pit's edge and as they stared down into it with their great single eyes we heard the whistling sounds of their conversation with each other.

Their three spheres showed no signs of re-ascending. It was clear that the three globes and their occupants had been deputed to guard the immediate mouth of the shaft while the hundred others patrolled watchfully all the country around it.

DARRELL and I, crouching there, saw that we had no chance whatever of escaping from our present position. For even there in the darkness we were forced to crouch low to the earth every few minutes or so as one of the white beams from the circling spheres above and about us would cut down through the night and through the jungle about us.

It would be impossible, we knew, to attempt to win free by crawling back through the jungle, since across it there lay other clearings in which would be no shelter from the searching beams and blasting yellow rays of the spheres. Also, neither Darrell nor I would have left the great shaft itself, down into which we had seen our two friends taken.

So, hidden there, we watched, still somewhat dazed by the thing that had befallen us, the great creatures in the clearing before us. They had turned from the shaft, and were examining the spectrographs and electrical apparatus at the clearing's tip which had been used by Kelsall and Fenton on the appearance of the fourth light-shaft.

All of this apparatus they brought back to the shaft's mouth and then, glimpsing the cameras and fluoroscopes lying a little out in the clearing from Darrell and myself, were dragging themselves toward these also. We melted farther back into the dense growths as they came near, saw them gather up that apparatus also and carry it back to the great shaft's edge, never suspecting our presence there in the growths so near them.

Then, after examining our tent and equipment by the river's edge, they seemed satisfied for the time and settled themselves heavily about their spheres, conversing in their whistling speech-sounds.

Then too the brilliant constellations far above seemed fading a little as the gray light of dawn welled up eastward, spreading a pallor over all the heavens. Flushing to rose, then to crimson with the uprush of the red tropical sun, the skies overhead marked the coming of day and as Darrell and I glimpsed now the dark metal spheres of the flesh-creatures circling hummingly still overhead, we saw that their searching white beams of light had been snapped out.

In the clearing there lounged still, grouped watchfully about their spheres, the score or so of the flesh-monsters visible there. They seemed even more grotesque and terrible in appearance in the light of day than they had been by night. And as day shed its light upon them and upon us, the daze of astounded horror that had been upon us since the first terrific blasting of the shaft and uprush of the spheres seemed to lift for the first time.

"Darrell," I whispered, "where do these things come from? What does it all mean?"

He shook his head. "It's incredible—unbelievable," he said. "But we saw them come up through the shaft they blasted upward. We saw them take Kelsall and Fenton back down—down to their world."

"But what is their world?" I asked. "It's impossible that these things should have come from some vast space inside our earth—yet what other theory can account for them?"

"I don't know, Vance. But it seems as though they might have come from some strange space inside earth, for they can move only with great efforts upon earth as though accustomed to a gravitational power far less

than that on the surface."

His reasoning was correct and I could only shake my head, stunned and overwhelmed by the utter strangeness of the thing. And as we stared into the sunlit clearing at the monsters and spheres about the shaft, during the slow hours of that morning, their strangeness and that mystery loomed larger and larger in my mind.

What and from where were these incredible flesh-creatures before us? Were they indeed from some vast space within the earth? I had heard the possibility of such spaces discussed many times.

Always it had been proved by geologists that such spaces, even if they did exist, could hold no form of life, since with each foot that one penetrated downward into earth its interior heat became greater, more unbearable. And if this were so, as it was so even in the first few miles which were all that man had ever scratched into earth's surface, terrific and annihilating temperatures must reign at earth's heart.

It had long been known that earth's temperature increased approximately a degree for each sixty or seventy feet that one descended. This meant that at a depth of a few dozen miles all matter must be in a molten condition, flaming with fiery heat. That theory, indeed, was directly borne out by the numberless volcanoes upon earth's surface in past and present, each of which flung up from time to time masses of the molten rock from earth's fiery interior.

How then could any great space exist in earth's molten interior, how was it possible, even were such space by some miracle to exist, for life to exist inside it at the tremendous temperatures that reigned there? It was well enough for fancy to conjure up great caverned spaces and peoples inhabiting them inside earth's huge mass but the undisputable fact of the molten fires made them impossible.

Yet at the same time we had forced upon us the equally undebatable fact that it was from a space or world within earth's mass that these strange flesh creatures had risen. And how, in the face of what we knew, could such a space or world exist? And, greater mystery still, if such a great space inside earth existed it must lie beneath ourselves, since it was straight up from beneath that these creatures had blasted their great shaft.

Yet it was not only here that the great light-shaft had appeared but at three other places located with super-mathematical precision at three spots exactly on earth's equator like this one, all four being equidistant exactly from each other! What had been the purpose of those four strange columns of light?

Why had the fourth only been followed by the blasting of a shaft upward? Above all what was the purpose of the flesh-monsters in bursting up to earth's surface in their spheres, in guarding now so watchfully the great shaft that was their passageway?

CHAPTER IV

Tortured Hours

IT SEEMED to me during the seemingly-endless hours of that day that these questions were making of my mind a chaos of wild suggestions and counter-suggestions. The whole strange thing that had occurred, that was occurring, was so utterly alien to the natural course of events, so utterly inexplicable by any natural reasons, that it was only with an effort that I could consider it even in the hope of finding some explanation.

And as explanation there was none I could only give the thing up at last, ceasing my attempts to comprehend, and concentrating my scattered thoughts as much as possible upon the predicament in which we now found ourselves.

That our situation was in truth a desperate one was more and more apparent to us every hour. For as the burning sun slowly traversed its path across the heavens overhead, blazing down upon us and all about us with its full blistering heat, we saw that escape was as remote as ever.

The great flesh-monsters in the clearing, whom I had hoped the sun's heat would drive to the shelter of their spheres, seemed quite unaffected by it. It was a thing that puzzled me somewhat since it seemed to me that creatures from some cavernous and sunless space beneath would needs be seared to death by the scorching rays of the equatorial sun.

But it was apparent that those rays harmed them not at all. And high overhead the great

ring of circling spheres still patrolled watchfully, still hummed here and there in their watch of the country around their great shaft, so that to break from our retreat though for but a moment would be suicide.

Yet suicide it seemed to Darrell and myself to stay in that retreat as the slow hours of that day dragged past. For we knew that not much longer could we stand this killing combination of heat, hunger and thirst. Our lack of water, indeed, we appeased a little by chewing a twig from time to time but our hunger was steadily growing and the heat of the blazing sun above was penetrating to us and making us dizzy.

Once, I remember, I returned to realization of my surroundings from such a giddiness to find myself standing erect and would have stumbled into the clearing had not Darrell held me back. Yet the great white monsters there at the shaft's mouth remained there still as watchfully as ever, their cube-containers of the yellow ray always in their grasp or at hand.

Once we saw them draw out from their spheres flexible metal tubes which they inserted in the small holes or apertures in their mouths. We guessed that they were feeding, were drawing from containers or reservoirs in the spheres some liquid or semi-liquid food.

Save for this incident, there was no break in the deadly monotony of the hours. As, after a time that seemed an age, we saw the sun settling westward my tortured state of mind became all but unbearable.

And then, as night crept again swiftly across the world, the great ring of circling spheres above snapped into being again their white stabbing searchlight-beams, keeping still their never-ceasing and enigmatic watch. The three spheres around the great shaft sent their own beams stabbing forth to bathe all the clearing about them in white light also.

Sunk into a torpor of despair, Darrell and I were roused shortly after the coming of night by a sudden swift flurry of action in one of the rivers north of us. There was the swash of some great reptile in its waters and at the sound from one of the circling spheres above a narrow yellow ray cut down toward the creature, blasting it instantly from existence with a sharp detonation.

I saw the yellow beam stabbing downward, guessed its nature, surmising it to be some form of electronic stream shot with intense concentrated power. This, as I was later to learn, was correct, the yellow ray being in effect a highly concentrated stream of independent electrons, which were gathered in a special de-atomizing chamber and then shot forth in a concentrated stream with terrific power.

It was thus very much similar in some ways to the well-known Coolidge or cathode ray of our own scientists. But it was immeasurably more concentrated and forceful so that it had upon all matter it touched an annihilating effect.

THE yellow electron-stream was of such force as to wreck completely all atomic structures it touched, by smashing the revolving electrons of that matter's atoms into their central protons or knocking them completely loose from those protons. Thus in an instant it destroyed the matter it touched, transforming it into a comparatively tiny scattered swarm of protons and loose electrons.

It was by means of a similar ray of gigantic size and power that the flesh-monsters had driven their great shaft upward to earth's surface. And it was the same ray in an altered form that was used to drive the great spheres at such speed through the air, a projector at the rear of each sphere shooting forth a somewhat less powerful fanlike ray into the air behind.

This weaker and broader ray, invisible because of its weakness, had not enough force or concentration to destroy the air behind it with its broad electron-stream. But it shot forth at sufficient speed against the air's atoms to result in a definite push against them, its push being utilized to send the sphere driving forward, its direction being altered by changing the direction of the rear-projector, while its speed was varied by increasing or decreasing the force of the electron-stream.

During our watch so far Darrell and I had divined some of these facts—but as I saw the yellow ray stab downward to the north of us it suggested something to me. I turned swiftly to Darrell and then in a tense whisper outlined to him my plan.

I felt that it held our only chance of action, since I knew that we could not lie much longer in our retreat, fighting the combined influences of heat, hunger, thirst and mental

agony. It was with conviction that I told Darrell the scheme, wild as it was, held our only hope.

"It's our one chance, Darrell," I whispered. "Our one chance to get down that great shaft—to follow Kelsall and Fenton into whatever strange world they've been taken and rescue them, bring them back!"

Darrell slowly nodded. "We'll have to try it, Vance. If we could get free—could warn the world of the coming of these things—we'd do so swiftly enough. But there's no chance for us to get out of this place with all those spheres above and there is a chance to get down the shaft."

"It's so, Darrell," I said. "And if we can get down there, bring Kelsall and Fenton back with us, we should be able to break through these guarding spheres here and carry the truth to the world."

We were both silent for a moment, as a little to the north and above a sphere hummed past with white beam circling. Then, half-rising, I began to carry out our risky plan of action.

Turning a glance first upon the things in the clearing, I saw that the three spheres still rested around the great shaft, the flesh-monsters were still grouped around and partly within them. Their white beams bathed all the clearing.

If we were to steal one of those spheres, as we planned now to do, we must get those great creatures away from them, if only for a moment. To achieve that purpose I moved silently in the darkness on the ground and in the growths about us.

In a moment my groping fingers encountered that which they sought, a long and heavy section of dead limb that lay rotting in the mold beside us. I grasped it tightly and then Darrell and I were creeping from our place of concealment in the thick brush, were creeping out until we crouched down just at the clearing's edge, our eyes upon the group of spheres and flesh-monsters at its center around the shaft's mouth.

We waited there, all nerves taut, waited until the humming spheres that came and went high above seemed for the moment to have passed over and beyond us. Then, half rising, I whirled the big length of wood silently around my head and then threw it with all my force toward the river west of us. It splashed loudly, the sound tremendous in my strained ears amid the comparative silence that had lain all about us.

Instantly the flesh-monsters around the spheres had risen, listening. The next moment they were hurrying with great effort across the clearing toward the river west of it, forsaking the spheres for the moment to investigate the source of that splashing noise, their ray-cubes ready in their grasp.

Tensely we watched as they hastened away and saw that in only one of the spheres, that nearest us, did there seem still to be any of the creatures, two of them remaining inside as though on guard. The remainder of the flesh-creatures were already halfway to the river.

Darrell and I saw instantly that to overcome the two creatures whom we could glimpse in the nearest sphere was our single chance. So, silently but as swiftly as possible, we crept out into the clearing and the white light that lay across it toward that nearest sphere!

AS WE crept out into that white light, our automatics ready in our grasp, I heard the whistling speech of the creatures that were almost at the river's edge. I prayed that none might turn back toward us, that none of the spheres might hum down over us in those seconds.

On toward the nearest sphere we moved, half-crawling, half-running, keeping out of line with its round open door so that the two creatures inside might not glimpse us. It was the sphere furthest from the creatures at the river-bank and in the moments that we crept toward it we kept its great round gleaming bulk as well as we could between those flesh-monsters and ourselves.

Hearts pounding with excitement and suspense, we neared the sphere. As though to favor our venture the humming spheres that came and went above seemed to have expanded their ring still further or to be hovering over the land around the clearing rather than over the clearing itself.

I could glimpse their flashing white beams high in the darkness to north and south, could glimpse too the unchanging white stars above. I could hear the whistling speech-sounds of the two flesh-monsters inside the sphere as we crept nearer its open door.

Another moment and we were peering within. The sphere's interior was divided

into compartments by square walls within it. From the round door a narrow corridor led across the sphere's mass toward a small control-room on its opposite side, one in which we could glimpse the switches and strange instruments that guided the great sphere's operation.

The door was near the ground, the corridor through the sphere slanting upward. It was in this corridor that the two flesh-monsters were standing, their backs toward us. They were gazing in the other direction through the transparent wall or window of the control-room to the river-bank, where their fellows were now hastening.

Without a sound Darrell and I crept through the door's round opening into the corridor behind the two great creatures, noting that each held in its grasp one of the ray-cubes. Up the corridor's slanting floor, into the sphere, we moved toward them. Another moment would have seen us directly upon them but at that instant Darrell's foot slipped upon the floor of the metal-sided corridor.

As he fell the two creatures whirled instantly toward us! But as their strange arms flashed up with the ray-cubes in their grasp we leaped upon them. Before they had time to give warning to their fellows with a single whistling cry we were grappling with them in a swift intense fury!

I felt the great mass of the monster with whom I struggled pressing down upon me, felt its thick strange arms reaching to grip me or to bring the metal cube of the yellow ray into play. But the creature seemed capable of moving each big arm or limb only with an effort.

Before it could crush me to the floor I raised the pistol in my hand, pressed its muzzle between the great staring eye and the horizontal row of holes that was its mouth. As I pressed the trigger there was a muffled report and the great mass before me tumbled downward, carrying me to the corridor floor with it.

I sprang up to find the other monster had borne Darrell against the wall with all its great weight. But Darrell's pistol had come up against the creature's body and as muffled reports sounded simultaneously from our weapons it too fell. But this one, in the instant before it died, gave vent to a great whistling cry!

Instantly its cry was answered by other cries from the mass of flesh-monsters at the river's edge. As we thrust the two lifeless creatures out of the sphere we saw the others rushing madly across the clearing toward us! I shouted hoarsely to Darrell, sprang down the sphere's little corridor into the control-room at its end, cast for a moment an agonized glance around that little room.

The whole curving front was one great transparent window, through which I could see the flesh-monsters hobbling toward us. They had not loosed upon us the rays of the cubes they carried, thinking no doubt that in the sphere were still their two fellows. I surveyed swiftly the controls of the sphere that lay before me.

The main feature of those controls seemed to be a row of metal studs set into a low panel, in front of which rose from the floor two low metal standards. Upon the top of each was set horizontally a small metal wheel. I grasped these wheels, turned them, twisted them, but there came no response from the great sphere's mechanism. In another moment the flesh-creatures outside would reach us!

I heard Darrell shout something to me, reached forward then in desperation and began snapping out the studs in the panel, one after another. Then, as I tried the centermost of those studs there sounded suddenly a welcome and powerful humming from somewhere in the sphere beneath us.

From outside came whistling cries as the flesh-monsters rushed over the last few yards of the clearing toward our sphere's door. I heard Darrell's gun cracking as he strove to hold them back. For an instant they fell back before his fire but then, seeing through the door that the sphere held none of their fellows, they were raising their deadly cubes toward us!

At that moment my hands flashed back to the two wheels, turned them again. As the first of them moved beneath my hands the great bulk of our humming sphere jerked suddenly up and forward over the great black mouth of the mighty shaft!

Hanging above its black depths I heard cries from the flesh-creatures below, glimpsed them running suddenly toward the two other spheres at the shaft's edge, heard the clang of our own sphere's round door as Darrell slammed it shut.

Then I spun the central wheel and even as

the running flesh-creatures sent a dozen yellow beams stabbing toward us our great sphere plunged suddenly downward! Downward into the blackness of the shaft at the sphere's full speed, downward toward whatever mighty mystery or menace lay below!

CHAPTER V

Down the Shaft

IN THAT first moment, as we flashed down into the great shaft's darkness, all my efforts were bent upon the single object of keeping our plunging sphere from crashing into the shaft's sides. The white beams of light that stabbed from our sphere were the one means of judging our distance from the shaft's sides.

The sides, as seen in our beams' light, were but a swift blur of matter. At the awful speed with which our sphere was whirling downward nothing more of them was to be seen. And as I hunched there over the twin control-wheels, whose use I had half-learned and half-divined in the first awful moments of the great sphere's rush, it seemed impossible that, unused as I was to its operation, I could keep our round vehicle from crashing.

Gripping the wheels, having found that one was to control the direction of the sphere's motion and the other its speed, I strove to keep our great globe rushing straight downward. In another moment I found that one of the myriad strange instruments placed above the panel of studs was in the nature of a flight-level indicator. By keeping the red dot that moved along this instrument's graduated length exactly at its center I was keeping the sphere falling exactly downward.

With this discovery I breathed a little easier, then stiffened as Darrell, who was crouching beside me, gave a startled cry. He was pointing through the upper portion of our curving control-room window.

"Above us, Vance!" he was crying. "Two spheres—they're pursuing us down the shaft!"

I whirled the speed-wheel again and as the humming beneath us waxed deeper our great sphere shot ahead faster and faster. It seemed straining beyond its normal speed in its wild rush straight toward the center of the earth. But above the white beams were dropping nearer, overtaking us, operated as they were by the flesh-creatures who understood them far better than I. They had means of increasing their speed that I did not know.

For long minutes we rushed down, pursuers and pursued plunging at a speed that was slowly causing the sphere to become hotter and hotter. Down into and through darkness unimaginable. Then as they drew steadily closer, the two spheres shot two narrow yellow rays stabbing down toward us!

I cried hoarsely to Darrell as I swerved our downrushing sphere almost to the great shaft's side to evade them. "The rays—they mean to get us with the rays!"

"Not if we can strike back at them!" he shouted. "If I could find the control of our own sphere's rays—"

He was frantically examining the myriad strange instruments and switch-batteries that were set in the little control-room's sides. In another instant their rays shot down toward us again, their white light-beams holding us in their glare. But with another wild swerve of the sphere I managed to escape the twin shafts of destruction. This time, though, I almost crashed the sphere into the other uprushing wall of the great shaft. I knew that we could not continue to escape them thus for long.

Then came another shout from Darrell and I turned to see that he had gripped a strange control set beside the control-room's window, a metal globe that was a tiny replica of our great globe with small studs set at six equidistant points on its spherical surface.

Darrell pressed upon the stud at the little sphere's top. As he did so there stabbed suddenly upward from the top of our own sphere a brilliant yellow beam that leaped upward and just between our two pursuers overhead! For an instant they seemed daunted by that unexpected shaft, fell back above us a little, but then they were plunging down again with renewed speed, their own yellow beams clashing and crossing with ours in the shaft.

NEVER could there have been combat so wild and strange as that between three great spheres rushing down into the darkness and mystery of the great shaft, into the

depths of the earth. I heard Darrell's hoarse exclamation as he sent our own rays stabbing up toward our pursuers, heard even above the great humming of the spheres and the rush of air about us the dull and distant detonations caused by the rays striking the great shaft's walls.

Whirling our plunging sphere precariously to this side and that, grazing the shaft's walls in wild efforts to escape the yellow rays that stabbed down about us, I realized that the two pursuing spheres above were drawing closer and closer. They would soon be upon us and able to loose their rays upon us without a chance of our escaping them.

In one last desperate expedient lay our only hope of escape. Above the wild melange of sound about us I shouted a few brief words to Darrell. He nodded swiftly as he understood my plan. Gripping the wheels tightly, I waited for a breathless instant, then suddenly closed the speed-control, whirling its wheel around and slackening the downward speed of our great sphere with breathtaking swiftness.

So unexpected was that slowing of ours that, even as I hoped, the two spheres above were past us on either side before they could comprehend our action or could slow their own spheres. In the next moment, as we hung for a moment above them, Darrell sent our yellow ray stabbing down upon them, striking both spheres squarely.

For a moment they seemed to hesitate and then, as the brilliant beam of death struck them, both seemed to melt abruptly and vanish! Then came the sharp detonations caused by the surrounding air rushing into the vacuum left by the spheres' annihilation.

We were alone in the darkness of the great shaft, moving downward now at slow speed as we relaxed, half disbelieving our escape from those two relentless enemies. The only sound now was the humming of our own sphere and as we looked up and downward we saw that the only light in the great shaft was that of our own sphere's white beams, circling slowly about as our globe of metal moved downward.

"We got both spheres!" Darrell exclaimed, leaning wearily against the wall.

"Yes, and no more will be after us from above," I said, glancing upward. "They had no time to give the alarm to the other scores of spheres watching above."

"We've escaped them, at least," Darrell said. "But what lies beneath?"

"We must be many miles down the shaft already," I said, "but there's no change that I can see in the shaft's size or darkness. We must simply keep on, Darrell."

I opened again the speed-control. As our sphere shot downward once more, falling smoothly again into the great shaft's dark depths, we watched carefully the few details of its walls that were visible in the light of the white beams.

Minutes before, during our wild running fight, we had flashed past and beneath the levels of limestone and sandstone and all the upper strata. As far as we could make out in the uncertain vision of our downward rush we were now falling between walls of igneous or fire-formed rock, the great shaft's opening having been driven smoothly and vertically up through them.

Down—down—down—the shaft seemed endless to me as I gazed into the unfathomable darkness that lay beneath us, a darkness in which the beams of our sphere seemed overwhelmed. We were humming downward at a speed that was as great almost as that of our first rush.

As the moments sped past I knew that we must be sinking farther and farther beneath the surface of earth each moment. Yet still the darkness and the curving walls of the great shaft about us were the same.

Intent upon the darkness below, in the hope of glimpsing something in that darkness, neither Darrell nor I noticed until moments later an item which had been thrusting itself upon us increasingly with each passing moment. The sphere and the air inside it were growing steadily hotter.

AS OUR minds took in this fact we exchanged sudden glances. Already we were breathing with some difficulty and already the metal of the sphere about us seemed to have become almost too hot to touch. As we gazed downward we saw in the darkness beneath a strange feeble glow of light, a flickering sulphurous light that was becoming slowly stronger.

Already, I knew, we must be hundreds of miles beneath earth's surface. And as the sulphurous glow beneath us grew in intensity, as the heat about us became stronger and stronger, it seemed that our sphere must

needs be falling straight to a fiery death. Yet the great shaft's walls fell still vertically downward and though the walls of rock seemed glowing themselves with their own great heat I held the sphere's course straight downward with Darrell beside me gripping my arm.

There could be no doubt that the walls about us were radiating their own intense heat and light. I held the sphere as exactly as possible to the shaft's center and we fell on downward, away from those glowing walls of rock.

Within moments the glow about and beneath us had become intense, terrible, and we could see that they were of solid rock no longer but of glowing, half-melting, half-fusing rock, becoming less and less solid.

We could glimpse flashing portions of the walls flowing and moving slowly in thick molten currents, their fierce light strong upon us. It was as though we were falling through the center of a fiery hell. The terrific heat that radiated from the walls seemed to wither us as we crouched there!

The metal of the sphere had become burning to the touch, the air within it all but stifling. As we choked and panted I knew that even to brush against the molten walls through which we were falling would be to annihilate our sphere in their searing heat. It seemed incredible that they had not flowed in upon the shaft and closed it.

"We can't go on," Darrell gasped, his face flushed, his eyes rolling wildly. "This is unbearable."

I agreed weakly. I felt as though I could stand it for only a few minutes more. We were reaching the end. But then a sudden thought flashed through my tortured brain. How did those fleshy monsters stand it? They must have some means to protect themselves against a furnace in which no living thing could exist.

I told Darrell my thought. His head jerked up suddenly.

"Yes, that must be so. But how?"

"The controls," I said, "try them. There must be one to handle it."

And as I slackened the speed so that we were jerked against the floor of the sphere Darrell with his last strength fingered the other strange controls that lined the panels, trying this one and that. There was one set like a knob that caught his attention. It was on a wall and apparently had no relation to the others.

"I don't know what we're doing," he laughed weakly, "I may be plunging us to destruction with this."

"It's destruction anyway," I murmured. "Do anything to get us from this unbearable heat."

I saw him turn the knob clear around. And of a sudden there came a loud sputtering and whistling as of air being suddenly swirled. It seemed as though a tornado had broken loose outside our car. I had to use all my energy to keep the car on its path.

But to my utter surprise and relief in a few seconds the air became gradually cooler. The walls, which had begun to take on a reddish glow, went dark again. I saw Darrell smile at me weakly and then slump to the floor in a dead faint.

Although the air was becoming cooler the walls of the shaft were just as hot. These creatures then had some strange means of getting a local refrigeration. The violent displacement of the air was caused by the cooled air about our car giving way to the more heated.

In a few minutes the atmosphere of the car had become bearable again. In fact it was steadily growing cold. Slowing up the car I reached over and, letting go of the control wheel for a moment, flipped halfway back the knob that Darrell had turned. The air became slightly warmer and the raging of the driven air outside subsided somewhat.

Darrell gradually came back to consciousness as we plunged down again. He slowly rose to his feet and gazed about him unsteadily.

"We're saved again." He smiled. "And what now?"

What now? That was the question in my own mind.

Then there was a sudden increase in the thunderous sound and fierce light and searing heat about us. We seemed for an instant to be whirling down into solid flames about and beneath us. As in a flash, a great circular opening in the walls of fiery light appeared directly beneath us. Our sphere fell downward still at its tremendous speed and we shot suddenly into open space, into a vast, apparently empty space.

"Through!" Darrell shouted as we shot on downward with the shaft's opening and the

molten walls above us. "We've got through!"

"Through!" I repeated, unconsciously bringing our falling sphere to a halt. "Through—but into what?"

FOR, as we hung there, our first wild moment of exultation over, Darrell and I gazed out our sphere's window with an amazement that each moment deepened. For the space that stretched now about and below us was vast, gigantic!

Just above us was stretched over our heads, like a vast glowing roof, a far-stretching surface of molten glowing rock, a fiery sea of intense heat and light from horizon to horizon, literally, hanging above our heads like a strange sky of flowing flame!

We could see slow vast currents in that molten roof above us, could see also in it a round dark opening just above us, the opening of the shaft down which we had come, the shaft that led up to earth's surface!

Our eyes followed the giant curve of that fiery roof, saw that it was like a great dome above us, like the dome of earth's own sky, but a sky of glowing fire, curving downward so far away that we could hardly glimpse it. Thus the earth was really a gigantic hollow shell that enclosed within itself a vast space that to our stunned eyes seemed immeasurable.

We were within earth's shell! And that shell of a thickness of not more than a thousand miles even as men had found, grew in temperature with each mile of its depth. Its inner surface was a giant sea of molten rock, clinging to the inner surface of earth's shell as unalterably as earth's seas cling to its outer shell because the center of gravity of the giant shell lay somewhere within its own thickness!

And that was why the molten sea of the roof that curved above us and beneath and all about us did not fall upon us. It could not any more than earth's seas can all fall outward into space. But the greatest wonder was to come. For of a sudden we saw below us as though suspended in the hollow of the great shell a great sphere.

A world! A great spherical world that was half the diameter of this great hollow space, that hung beneath us at its center, motionless but turning! A great world here *inside* our own world's shell, warmed and lit by the never-ceasing glowing light and heat from the molten inner surface that enclosed the space in which it hung!

"A world!" my exclamation was stunned, awed. "A world hidden here at earth's heart."

Darrell's voice was as hushed with awe as my own. "A world in this great space inside our own world! And turning even as earth is turning, Vance!"

As we gazed tensely down we could make out more features of its gleaming surface, could see that it was covered with vaguely-glimpsed structures silhouetted in the light of the encircling molten shell. We could make out too the great outlines of some colossal greater structure almost directly beneath us and could glimpse, even from our height, swarms of swift shapes driving to and fro above this strange world's surface!

I pointed eagerly down toward them. "Those spheres, Darrell!" I exclaimed. "Those gleaming buildings—it means that this is the flesh-creatures' world—that it is down here they took Kelsall and Fenton!"

DARRELL nodded, his eyes alight. "They're down here somewhere if they're still living. But have we any chance to get to them, Vance, to get them clear and back up the shaft?"

"We must try," I said. "In this sphere we can at least move about over the surface of this world without the flesh-creatures suspecting our presence. If we can find some trace of them, we should be able to get to them and get back to the shaft."

"It's our one chance," Darrell agreed.

I nodded grimly, gripping the control wheels once more, and then as I turned them our great sphere was falling again, humming straight down toward the great turning world beneath us. Above us the great molten glowing roof of this vast space was receding.

Gazing out as we fell, Darrell and I were able to appreciate to the full the vast size of this great hollow at earth's heart, this colossal space enclosed by earth's great shell. For to us it seemed that we were falling through open space, a space bounded in all directions not by blue sky but by a great glowing curving roof.

Within moments we had fallen so near to it that the turning world seemed to fill all space beneath us, shutting from view the

other curving molten inner side of earth's shell that stretched far beneath it. We could see that this spherical world was covered almost completely with strange gleaming structures, rectangular in form and rather flat, mighty structures between which there ran the narrow streets.

The streets gleamed as did the great structures in the glow of the molten sky surrounding this world. When we dropped nearer we saw why they did so, saw that streets and structures alike were transparent! They were built of some transparent metal or alloy that made them seem like giant structures of glass.

Coming closer and closer through the flat transparent roofs and walls we could make out vaguely the swarming masses of great white flesh-monsters and the strange masses of objects and mechanisms that those buildings held!

It was a city in which level was built upon level, numberless strata of streets and structures lying over each other, their transparent roofs and streets and walls allowing the light and heat that beat down upon this world to penetrate to the lowest levels! Here and there we could make out great well like openings that dropped down through countless levels, while almost beneath us upon the uppermost level lay the greatest and strangest structure visible on this strange world's surface.

It was a giant black shining disk, quite flat, fully five hundred feet in diameter. Beside it lay a smaller and similar disk, but a hundredth of the larger one's diameter. Beside both disks were a row of great transparent buildings or structures, crowded with half-glimpsed mechanisms which seemed in themselves more or less transparent and with countless flesh-creatures. And this great disk was of the same diameter as the great open shaft through which we had come!

Even as that fact impressed itself upon my brain Darrell cried out, pointed downward toward the great swarms of spheres moving to and fro over the world beneath us. We had been humming swiftly down toward them without giving them attention for the moment, engrossed as we were by the astounding spectacle of the strange world.

But now, as Darrell shouted, I felt a sudden stab of icy fear. For those swarming spheres had given way to all sides beneath us and up through them was rushing a close-massed swarm of more than a hundred gathered spheres, a hundred spheres that were whirling swiftly straight up toward ourselves!

CHAPTER VI

A World of Wonders

IN THAT moment, as the hundreds of spheres drove up toward us, Darrell and I stared transfixed with horror. Long before we could turn, could win back up to the shaft's opening, they would be upon us with their blasting yellow rays.

In an instant, it seemed, they were beneath us, whirling straight up, and then suddenly they had changed their formation a little, spreading out and swerving to one side. Before I could comprehend what had happened they were flashing up *past* us up toward the molten curving roof far overhead!

"The shaft!" Darrell was exclaiming. "They've gone to the shaft, another hundred spheres—but why?"

"I think I know," I said. "It must be that this hundred spheres have gone up to relieve the hundred guarding the shaft's mouth—they have been guarding it now for more than a day."

He nodded. "That must be it," he said, "but for the moment it seemed all up with us."

We turned our attention back toward the great strange world beneath, toward which we were still dropping in our humming sphere. I gradually decreased our speed until, when we shot down among the swarms of spheres that came and went above the transparent streets and structures of this world, we were moving at a moderate speed.

All about us the spheres were swarming and through their control-section windows we could glimpse the great white flesh-monsters inside at the controls. We took care to crouch as low as possible over the controls of our own great globe and, moving as we were, there seemed small possibility that any of the creatures in the flying spheres about us would recognize us as different from themselves.

As we shot among them Darrell and I surveyed with intense interest the features of

the world beneath. The streets beneath us were swarming with masses of the great flesh-monsters. Their great forms were hurrying to and fro with a speed far greater than that of their clumsy movements on earth's surface. We realized that it was the lesser gravitational attraction of this smaller world that accounted for their clumsiness and greater weight upon earth's surface.

Darrell was clutching my arm as we sped on across this strange teeming world. "What about Kelsall and Fenton?" he said. "How are we ever to find them here?"

"It seems impossible," I admitted, "but we must try."

He was viewing keenly the swarming scene beneath us as we shot on. "I think, Vance," he said, "that if Kelsall and Fenton are still living, are being held here by these flesh-things, it would be on one of the lower levels if only for safety's sake."

"But we can't explore the lower levels!" I pointed out. "Even here we may be discovered at any moment. To venture inside on foot would be suicide!"

"But there's another way we can try," Darrell said swiftly. "In the sphere we can get to those wells that sink down through the different levels—and perhaps get some clue to their whereabouts."

I realized that Darrell's plan was the only hope of finding our two friends. So I sent the sphere heading across the great transparent mass of structures and swarming streets, through the crowds of spheres that flashed to and fro above it, until there appeared ahead a great circular opening.

It was one of the great wells that we had seen from above, a shaft that sank down through the various transparent levels of this mighty world-city. As we neared it we saw that into it and from it was pouring a ceaseless stream of spheres like our own. We were quickly among them, hanging over the great well's depths. As I turned the control wheels our sphere began to sink downward.

A MOMENT more and we had sunk beneath the topmost level. Beside us stretched away the vast and swarming scene of the second level. A full hundred feet or more in height it was, from its floor to the transparent streets and structures of the topmost level, which formed its roof.

Down through it beat almost unabated the glowing light and heat that fell upon this world! In this second level though were no structures such as rose upon the first. Being completely under cover as it was, it formed in effect one gigantic room which stretched like the levels beneath and above it completely around this turning world!

It held a scene of strange activity that rivaled that of the top level. As we gazed far across it we all but forgot the object of our quest in the unparalleled interest of the scene. For about us was such a great melange of mighty mechanisms and busy flesh-things, such a babel of clanking and humming of machines and whistling of strange speech-sounds, that almost were we stunned by it.

And as we hung there, gazing from our sphere in fascination while other spheres from above and beneath us in the great well sped into this level or sped out of it, we could make out dimly the purpose of some of the great mechanisms we saw before us, could half-comprehend the true wonders on which our eyes rested.

Near us was one of the mightiest of the great mechanisms, a tremendous squat cylin-

[Turn page]

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drical affair constructed for the most part of transparent metal, for the purpose of impeding as little as possible the light and heat that fell to the lower levels.

A great chain-lift contrivance rose just beside it, an endless chain upon each few feet of which were great shallow cups or scoops filled with broken rock, rising up through the levels beneath by means of round openings in their floors. These masses of broken rock were automatically dumped into the uppermost section of the great transparent cylinder.

There was played upon them from all sides a lambent green light of force that was conveyed to the cylinder by thick cable connections. Beneath this green force the masses of rock were disintegrated instantly into a fine dust. As such they swirled down into the second section of the cylinder.

This section was divided into several transparent compartments, in each of which played an unceasing yellow ray like the electron-stream ray used by the flesh-monsters to annihilate matter. As the fine rock-dust entered these compartments it was annihilated instantly, was changed to a cloud of shining particles, rushing down into the third section of the cylinder, into similarly divided compartments, where another yellow ray played upon each.

Beneath this second yellow beam or force half-glimpsed shining clouds of particles changed back swiftly into visible matter, different in each compartment. In one it became a fine gray powder, in another a milky white liquid, in still another a thin saffron fluid.

And these poured down in turn from the vivid compartments into the cylinder's lowest section, where they mixed together instantly under the force of powerful vibrators to form a thick dark liquid. This was conveyed away by great pipelines of transparent metal to vast tanks visible in the distance.

This great mechanism, humming in unceasing operation, puzzled me for a moment. But then, as Darrell and I glimpsed small flexible tubes and nozzles projecting here and there from the pipelines, saw flesh-creatures now and then seizing the tubes and inserting the ends in their mouth-apertures, we remembered the same action on the part of the flesh-things above.

This dark liquid was their food. We realized that the giant cylindrical mechanism before us was one of countless similar mechanisms we could glimpse that were making that food directly from the rock brought up from beneath!

ELECTRONS and protons were acted upon again in separate compartments by different yellow rays, were built up by those rays into the desired substances by causing each proton to join the desired number of electrons, thus forming any element desired.

With the desired elements formed thus in each of the compartments it was needed only to let them mix together in the fourth section of the cylinder to form into the complex compound that was their synthetic food-substance. This much of the process I could fathom, as did Darrell, from what we could see before us, though we knew that in reality it must be much more complicated than that.

Far across this second level Darrell and I could see scores of great cylinder-mechanisms like the one before us, each served by a chain-lift that brought ceaseless supplies of rock up to it from beneath. Each swiftly converted these rock-masses into the dark liquid that flowed away to the great reservoir tanks located here and there.

From the tanks it was piped away in all directions, carrying the dark synthetic food-liquid by force of gravity down through a great pipe-system to all of this strange world-city's lower levels, the whole countless hordes of the flesh-creatures being able thus at any moment to obtain the necessary amount of food-liquid from the nearest tube and nozzle.

Across all this second level extended the great cylinder-machines and tanks, humming with activity and swarming with the flesh-things who watched and regulated the operation of the vast machines. But there was no sign of our two friends.

So, with a last glance across the level, I sent the sphere downward again in the great well. Spheres were crowding thickly about us still, halting here and there as they reached the level they desired and speeding away inside it. But all seemed so intent upon their own courses that their occupants gave no attention to our own globe.

So, when we reached the third great level, a hundred feet farther down, we hung motionless again, gazing with eager eyes through it as we had through the one above in the hope of glimpsing some trace of our friends.

Here the glow of light was perceptibly weaker and here the great mechanisms ranged about were of a visibly different nature. For though they were cylindrical in shape and much like those food-making mechanisms on the level above in appearance, it was not the dark food liquid that these were busy in producing.

Instead the electrons and protons that they made of the rock-masses fed into them were formed by successive treatments of the yellow force into white-hot streams of molten metal, which cooled swiftly into great ingots. These were conveyed from beneath the great cylinders by moving belts or platforms of metal.

The great new-formed ingots, in turn, were transferred to giant automatic presses, which in one motion changed them to great flat or curving plates of metal. What interested me most was the next step of the process, in which most of the plates and sections thus formed were carried along by their moving belts and between great tubes from which glowed a green force through which they slowly passed.

As they passed beneath the power of that green force we saw the great sections of metal becoming transparent before our eyes! It was apparent that the green force was one that in some way altered the molecular or crystalline structure of the metal, making it as transparent as glass itself without impairing the strength in any way.

And as we gazed thus with fascinated eyes at this mighty clanging workshop there came to me the answer to another thing that for some time had puzzled both Darrell and myself. We had, in all the vast swarming scenes that we had passed over and through so far on this strange world, seen none of the flesh-creatures sleeping or even resting.

Even the hundred spheres that had patrolled the shaft's mouth on earth far above had been relieved, we guessed, because of the need to replenish the power of their mechanisms rather than to give their occupants a rest. And since there was no night, could be no night, in this hidden world, why was it that none of the creatures we saw seemed ever to sleep or rest?

We saw the answer to that question in a single creature, who seemed to be moving slowly among the masses of the other busy flesh-creatures, stopping for a moment at each. As he came nearer to where our sphere hung we saw that he held in his grasp a transparent metal container of some thin bright crimson fluid.

With an apparatus very much like a long hypodermic needle he was injecting a swift shot of this fluid into each of the busy workers, a little below and to one side of the single great eye. For the moment the thing puzzled me but then I realized that this crimson fluid was one which neutralized in their bodies the toxins that caused the need of sleep.

CHAPTER VII

Makers of Flesh!

IT WAS a world of wonders into which Darrell and I were penetrating in our sphere. But after a last glance I shot the sphere down to the level beneath, to gaze along it also for some clue to our friends' whereabouts. A certain hopelessness had begun to fill me, a hopelessness that I expressed to Darrell.

"This immense world-city—these swarming levels," I said. "It seems hopeless, Darrell, to search for Kelsall and Fenton in them."

"It's our one chance to find them," he said, his own brow wrinkled anxiously. "We may light upon them yet."

"If we only knew where the center of government—the center of activity—of this world was," I said, "we'd have a chance. If Kelsall and Fenton live they'd be near it. But as it is—"

We were both silent, tense, almost despairing as we sank down farther in the great well. Tremendous massed machines, hurrying, busy flesh-things, rushing spheres, the clang and hum and hiss of sounds—these things stretched far away about us in that level and in the next beneath it and the next.

Down and down into the great well we sank, hanging beside each level and gazing across it in vain hopes for some trace of our two friends. And as we sank we noted that in each level light that filtered down through the transparent levels above was feebler, duskier.

Yet still there swarmed in each level the

the running flesh-creatures sent a dozen yellow beams stabbing toward us our great sphere plunged suddenly downward! Downward into the blackness of the shaft at the sphere's full speed, downward toward whatever mighty mystery or menace lay below!

CHAPTER V

Down the Shaft

IN THAT first moment, as we flashed down into the great shaft's darkness, all my efforts were bent upon the single object of keeping our plunging sphere from crashing into the shaft's sides. The white beams of light that stabbed from our sphere were the one means of judging our distance from the shaft's sides.

The sides, as seen in our beams' light, were but a swift blur of matter. At the awful speed with which our sphere was whirling downward nothing more of them was to be seen. And as I hunched there over the twin control-wheels, whose use I had half-learned and half-divined in the first awful moments of the great sphere's rush, it seemed impossible that, unused as I was to its operation, I could keep our round vehicle from crashing.

Gripping the wheels, having found that one was to control the direction of the sphere's motion and the other its speed, I strove to keep our great globe rushing straight downward. In another moment I found that one of the myriad strange instruments placed above the panel of studs was in the nature of a flight-level indicator. By keeping the red dot that moved along this instrument's graduated length exactly at its center I was keeping the sphere falling exactly downward.

With this discovery I breathed a little easier, then stiffened as Darrell, who was crouching beside me, gave a startled cry. He was pointing through the upper portion of our curving control-room window.

"Above us, Vance!" he was crying. "Two spheres—they're pursuing us down the shaft!"

I whirled the speed-wheel again and as the humming beneath us waxed deeper our great sphere shot ahead faster and faster. It seemed straining beyond its normal speed in its wild rush straight toward the center of the earth. But above the white beams were dropping nearer, overtaking us, operated as they were by the flesh-creatures who understood them far better than I. They had means of increasing their speed that I did not know.

For long minutes we rushed down, pursuers and pursued plunging at a speed that was slowly causing the sphere to become hotter and hotter. Down into and through darkness unimaginable. Then as they drew steadily closer, the two spheres shot two narrow yellow rays stabbing down toward us!

I cried hoarsely to Darrell as I swerved our downrushing sphere almost to the great shaft's side to evade them. "The rays—they mean to get us with the rays!"

"Not if we can strike back at them!" he shouted. "If I could find the control of our own sphere's rays—"

He was frantically examining the myriad strange instruments and switch-batteries that were set in the little control-room's sides. In another instant their rays shot down toward us again, their white light-beams holding us in their glare. But with another wild swerve of the sphere I managed to escape the twin shafts of destruction. This time, though, I almost crashed the sphere into the other uprushing wall of the great shaft. I knew that we could not continue to escape them thus for long.

Then came another shout from Darrell and I turned to see that he had gripped a strange control set beside the control-room's window, a metal globe that was a tiny replica of our great globe with small studs set at six equidistant points on its spherical surface.

Darrell pressed upon the stud at the little sphere's top. As he did so there stabbed suddenly upward from the top of our own sphere a brilliant yellow beam that leaped upward and just between our two pursuers overhead! For an instant they seemed daunted by that unexpected shaft, fell back above us a little, but then they were plunging down again with renewed speed, their own yellow beams clashing and crossing with ours in the shaft.

NEVER could there have been combat so wild and strange as that between three great spheres rushing down into the darkness and mystery of the great shaft, into the

about us and above and below us were converging toward the sixtieth of this great world's levels and were disappearing into that level.

From all about, from all the other levels and from far across this world's topmost transparent surface above, spheres were rushing in scores to answer that strange call, though save for them the activities about us were unchanged.

Darrell and I exchanged quick and eager glances as we saw the spheres disappearing in a great stream into the sixtieth. With a last hope that the summons might have some connection with our friends, we joined that stream of rushing spheres.

Between the transparent roof and floor of that level, through a dusky feeble glow of light that beat down through the levels above us, onward we sped with our fellow-globes in answer to the summons.

As we rushed on I was able to see that it was by means of great pillars of transparent metal that the great levels were held each above the other. All these levels, all this world, were in effect but one vast gigantic workshop.

A workshop it was whose activity seemed never to cease, the flesh-things tending always their mighty humming and clanking mechanisms, their only pauses being to take from the nearest tube of the great pipe-system their liquid food or to have injected into them, by the creatures set aside for that purpose, the crimson fatigue-neutralizing fluid. A vast workshop, indeed, and one that I knew was hammering out with each passing hour the doom of my own world.

But now the rushing stream of spheres about us was slowing and as we slowed also Darrell and I, peering forward through our window with eager excitement, saw that the spheres among which we moved were shooting out into some vast and apparently open space that lay before us. In another moment our own sphere, with those directly above it, was flashing out into the area and then we saw in that first glance that it was no open space but a vast hall.

VAST indeed was that hall, a tremendous oval room more than two thousand feet in length, extending through a dozen levels of this strange world. Beneath us stretched a great smooth floor, far above a transparent roof. Immense as it was the hall was all but filled with spheres like our own, hanging motionless in great swarms, hundreds upon hundreds.

In each of the spheres about us were one or more of the flesh-creatures, summoned from across this inner world by the strange call. And as Darrell and I gazed eagerly forth to find the purpose of the gathering, we saw for the first time that at one of the ends of the mighty oval room jutted forth a broad balcony, halfway between floor and roof.

Upon this balcony were gathered a row of some twelve great flesh-creatures, seated and regarding the spheres that had gathered here in answer to their summons. So far away were they from us in the vast hall that they seemed almost tiny. And then suddenly a stir of movement, of excitement perhaps, ran through all the massed spheres as one of the twelve seated figures arose and stepped forth to the balcony's edge.

For a moment he regarded the massed spheres before him in silence with his single great staring eye and then he began to speak, his whistling sounds coming out to us in the great hall loud and clear, sent forth, no doubt, by some amplifying apparatus.

Slowly and deliberately he spoke to the massed spheres in the great hall before him, to the flesh-creatures inside them—and though his speech-sounds were of course utterly unintelligible to Darrell and myself, there came to me a dim perception of the nature of the gathering about me.

I realized that the twelve creatures on the balcony must form the supreme ruling body of this hidden world, that the flesh-creatures in the hundreds of spheres about us that had gathered here must be the officials or lesser heads of that world.

Hanging there, it was as though Darrell and myself could all but understand the creature's strange speech, could understand that he was addressing the creatures about us concerning the vast work being rushed to completion, the giant plan these things had formulated to surge up upon our own earth.

A strange sense of unreality came to me as we hung there, listening to whistling speech-sounds. Our situation was so grotesque, so nightmare-like, that we seemed almost in the midst of some strange dream.

We snapped back to realization of our situation as the whistling voice of the great

creature on the balcony suddenly ceased. Whatever it was that he had said, whatever orders he had given to the creatures in the spheres about us, we saw another stir of movement run through their masses as he stopped.

He paused, then spoke again to them for a brief moment, then turned to give a short order to someone behind him. Instantly in answer to that order there emerged onto the broad balcony from the door through the wall behind it a half-score flesh-creatures, armed with the ray-cubes and guarding some figure or figures that walked forward among them.

They halted near the great balcony's edge and intense silence fell over all the great sphere-crowded hall. And then they stepped aside a little, disclosing two figures on whom they kept a tight hold.

Those two figures were Kelsall and Fenton!

CHAPTER VIII

The Origin of the Hidden World

MY FIRST impulse was to send our sphere flashing across the hall toward them and with our own rays send their captors to annihilation. But Darrell's hand was suddenly strong upon my wrist and though his eyes were as aiglit with excitement as my own he restrained my wild impulse.

"Not now, Vance!" he whispered tensely. "We've found them—but we can't make a move now!"

"Found them—yes!" I said, my heart hammering. "But why have they been brought here—brought before these things?"

"We'll soon see," Darrell said. "Hold steady—and our chance to free them will come."

So I waited with Darrell, gazing tensely toward the figures of our friends on the great balcony. Their guards held them face to face with the great flesh-monster who had been speaking to us. And as he surveyed them for a moment with his great eye we saw them returning his gaze, Kelsall's strong face drawn but steady, Fenton standing beside him with a hand upon his shoulder.

We saw them venture a glance around the great sphere-filled hall and could see that their belts no longer held their pistols. Then, as Kelsall and Fenton faced the great flesh-monster, he began to speak to them in the whistling speech-sounds of these things.

A moment only he spoke to them and to the amazement of Darrell and myself, when he had finished, Kelsall replied to him in the same whistling sounds or in a human-voiced imitation of them! There was silence when he had finished.

Then the creature, suddenly threatening and baleful in aspect, spoke to them again in a long deliberate exhortation of some sort. His whistling sounds, unintelligible to us, were listened to intently by Kelsall and Fenton as well as by all the creatures in the spheres about us.

And when the great monster had finished our two friends replied to him instantly with a single whistling sound, a single phrase or word. And as they did so there rose from all the flesh-things in the gathered spheres about us a sudden babel of whistling cries!

Darrell and I gazed across the hall tensely as the strange and sudden tumult arose, precipitated as it had been by whatever answer Kelsall and Fenton had made to the speech of the great creature before them. His whole attitude in that moment was as eloquent of anger as that of such an alien creature could be.

My hands tightened upon the controls. I looked for the thing to give an instant order for the death of our friends, so fierce and evident was the anger of all about us at whatever response they had made to him. Instead, though, the thing gave only a brief order to the half-score guards and they stepped instantly forward.

Still holding our friends they marched them back through the great door in the wall from which they had come. And then, as Kelsall and Fenton disappeared with their guards, the standing monster on the balcony turned back to the gathered spheres and again spoke to them.

As we heard his whistling speech, Darrell and I were gripped with tense impatience for we wanted only to follow our friends and their guards, yet dared make no move toward the door behind the balcony until the creatures upon it were gone. Tensely we waited, knowing that with each moment the guards and our friends would be farther from us.

Then, with a final whistling order, the great creature on the balcony ceased speaking. The spheres that filled the hall began to empty out of it. Pretending to join them, I held our own sphere in the hall and Darrell and I saw the twelve flesh-monsters on the balcony passing back from it through the great door in the wall behind it.

Then they were gone and soon the last of the great spheres had sped out of the mighty hall except our own. Instantly then I sent our own sphere driving across the huge room toward the balcony and the great door behind it.

Balcony and door were set in the great wall just above the sixtieth level. We reached them quickly and our big sphere proved small enough to pass easily through the portal. As we shot through it we found ourselves within the fifty-ninth level, feebly and duskily lit by what light came down through the transparent levels above.

Before us stretched great rows of vast machines like those we had glimpsed from the well. Those about us were engaged in turning forth metal ingots which were conveyed automatically to the great presses that shaped them into plates.

SWIFTLY we gazed about us but we could see nothing of our friends amid the swarming activity of flesh-creatures and machines of the guards. Then, as sharp despair seemed upon us once more, Darrell pointed away through great rows of the mechanisms and I made out the forms of the half-score guards, still grouped about our two friends, marching with them between the two great rows of machines.

Instantly I sent our sphere humming after them, holding it until, at a low speed, we were following them at a distance of a hundred yards or so. As we shot after them, curving now and then around some larger mechanism, we evoked no attention whatever from the flesh-creatures busy in countless numbers at the machines around us, since scores of other spheres like our own were darting to and fro within this level upon errands of their own.

We became aware that ahead the great mechanisms were coming to an end, their long rows giving place to a series of transparent-walled rooms of metal constructed in rows or blocks. Down a broad avenue between two such long rows of transparent-walled rooms the guards were moving with our two friends and slowly our big sphere followed them.

Most of the rooms on either side of us were storerooms of various materials, apparently too valuable to be allowed to lie loosely about. Some of them held masses of shining ores strange to us, others intricate mechanisms whose purposes we could not even guess, still others stores of what seemed projectors of the yellow ray. In none, though, were any of the flesh-creatures.

As we moved on behind the guards and our two friends we became aware that the clangor and hum of sound from the great machines behind was becoming fainter and fainter, that in these blocks of store-rooms and avenues into which we were moving there seemed hardly any flesh-creatures visible. Then as the guards around Kelsall and Fenton, far ahead of us, turned suddenly into an avenue leading to the left, they vanished from our view.

By the time that our own sphere had reached the turn and halted a little short of it we could see along this dusky branching corridor. The guards had halted Kelsall and Fenton for a moment at the door of a transparent-walled room, were opening that door.

This branching corridor was too narrow for our big sphere to enter and as we hovered there we saw the guards thrust our two friends inside, then close the door sharply after them, tampering for a moment after with some device upon its surface. Then they turned from the door and two of the flesh-creatures having posted themselves before it, ray-cubes in their grasp. The remaining eight came back toward the main avenue, toward ourselves.

At once I moved our sphere backward and sent it rising swiftly upward. The avenue, like the rooms on either side of it, extended clear to the roof of the fifty-ninth level, a hundred feet above, and the eight guards, unconscious of our presence above them, passed beneath us toward the great oval hall.

A MOMENT more and they were lost to view. I brought the sphere down to the floor again, to where the narrower corridor branched from the avenue. Keeping well back out of sight of the two guards, Darrell and I looked about us to make certain that

none of the flesh-creatures were in this quiet section of store-rooms.

"Now is our chance!" Darrell whispered. "If we can overpower those two guards and get Kelsall and Fenton out of that cell and into our sphere we'll be able to make our way back up the shaft to earth's surface!"

"We still have our pistols," I said.

"Yes, but no noise if it can be helped, Vance," he cautioned. "A shot is liable to bring a swarm of the creatures upon us."

Having seen to the magazines of our automatics we turned toward the round door of our sphere, swung it quietly open. I took a quick step onto the great avenue's translucent floor and found myself rocketing smoothly upward toward the roof!

Fear gripped my heart. I heard a hoarse whisper from Darrell below and then as he stepped out from the sphere he was falling smoothly upward with me. Our heads had bumped gently against the roof of the level and then we were falling as smoothly and gently downward, lighting like falling feathers upon the avenue's floor!

Crouching far back in the avenue from the corridor of the two guards and our friends' cell, we lay with hearts pounding, finding that each slight stir of our muscles caused us to float up for a yard or more from the floor.

Then abruptly light came to me. "The gravity, Darrell!" I whispered. "You remember how the flesh-creatures could hardly move on our own world's surface? It's the same with us, only reversed!"

I saw comprehension in his eyes. Crouching in our sphere, holding to the controls and moving constantly to and fro, we had not noticed this. But immediately upon emerging from the sphere and using our muscles it had become apparent to us in this startling fashion.

After a few moments' experimentation we found that by lying flat and crawling slowly forward as a swimmer might crawl upon a pool's bottom we could progress forward at fair speed and in silence. We crept down the avenue toward the narrow corridor that branched to the left from it, in which were stationed the two guards outside the cell of our friends.

IN A moment we had reached the corridor. Through the dim dusk that reigned on this level we could make out vaguely the great white shapes, standing outside the cell door, ray-cubes watchfully in their grasp. I turned to Darrell for a last word with him before we leaped upon the two guards. And as I turned there was a violent rocking and swaying of the floor beneath us.

The whole strange world seemed to rock and quake about us. There was a distant, thunderous booming detonation, an awful grinding roar that continued for minutes before dying away. As it did die away there came strange whistling cries from all about and above and beneath us, a babel of alarms.

We could make out hordes of the flesh-creatures, rushing toward some point in the distance. Darrell and I regarded each other with astonishment, then gave it up as the uproar of alarm in the levels about us died down somewhat. Whatever had caused that tremendous shock and quake, that had caused the alarm of the flesh-creatures, we dared not lose time now in speculation.

Creeping again to the corridor, we saw that the two guards, shaken and astonished, were holding their stations, though discussing the thing in their high whistling voices.

We reversed our pistols and gathered ourselves. Then with all the power of our muscles we went flying through the air in a great leap toward them!

Buoyed up as we were by the infinitely smaller gravity of this hidden world, we were upon them in a single mighty leap! They heard our jump, turned swiftly toward us, their deadly ray-cubes rising.

But before they could loose the brilliant yellow death within those cubes we hurtled down upon them and knocked the cubes from their grasp. At the same moment I felt my own pistol knocked free by the force of our own impact, and then, weaponless as the creatures before me, I was struggling wildly with one of them while Darrell grappled the other!

I felt the thick arms of the big flesh-monster's lower body grip me tightly, felt him bear me to the floor with his great weight. I struck out with all my strength at the features of the thing. As we rolled and swayed there in that flashing moment the single great staring eye, the strange apertures of the mouth, were directly beside my own face, within an inch of mine.

Those nightmare features so close to my own sickened me. I felt my strength fast

waning. I had a glimpse of Darrell struggling wildly with the other monster beside me and then the grip of great arms was tightening in a spine-crushing grasp!

I struck out again, again, again but my blows seemed to fall without effect upon the great flesh-mass with which I struggled. I felt my strength melting from me in stabs of excruciating pain, felt my senses darkening beneath thrusts of pain.

Then as from a great distance I heard a dull report, a moment later another. At the second the grip about me abruptly loosened. I staggered up from my antagonist's grasp to see him quivering in a last convulsion on the floor. The other was already dead! Over them, panting and disheveled, stood Darrell, his still-smoking pistol in his hand.

We listened intently for a moment but heard no sound of alarm to indicate that our shot had been heard by the creatures in the levels above and beneath. Quickly Darrell and I raced farther down the corridor, were racing down toward the door through which we had seen our two friends thrust.

It was a tall door, made of the same transparent metal as the walls of the rooms about us. And there, pressed against its inner side, gazing with wide eyes up the corridor toward the scene of the battle we had just taken part in, were Kelsall and Fenton!

"Darrell—Vance!" Kelsall's astounded voice came out to us through the little ventilation-holes set in the door and walls of their transparent cell. "How did you two get down here?"

"Kelsall!" Darrell pawed eagerly at the transparent door with myself as he spoke. "We've come after you, Kelsall—after you and Fenton—we saw you there in the great hall and saw your guards bring you here—!"

"But the door!" Kelsall exclaimed. "You can never get it open, Darrell. Only the leader of the guards that brought me here is able to open the lock."

CHAPTER IX

A Single Hope

BUT WE had discovered for ourselves that the great door was like none we had seen before. The great hinges to one side of it, the strange dial-like arrangement of a score of studs upon its center, were the only things that indicated the presence of a door, since the transparent metal of the door apparently was entirely integral with the transparent metal of the wall in which it was set!

Kelsall explained swiftly. "It's the mechanism controlled by those central studs that locks the door," he said, "and it locks the door by making it part of the wall around it. It uses a molecular-diffusion force to mix and intermingle the molecules of the door and wall at their edges, thus making of door and wall a single homogeneous substance.

"When those studs are pressed in a certain very complex combination, they reverse that force and the molecules of door and wall are sharply divided, making it possible to swing the door open. But without knowing that combination, without using it to reverse the force, you can no more swing open this door than you can swing open any section of this wall.

"You can't use the guards' ray-cubes to cut through the wall. They'd annihilate the whole cell and ourselves inside it."

"But how to get you out, Kelsall?" Darrell asked in despair. "We have a sphere here and in it we might get back up the shaft —to earth's surface."

"The only way is to wait until the other guards return," Kelsall said. "Their leader alone can open and close this lock, and they will come back for Fenton and myself in a few hours. The leaders of these flesh-creatures are holding a last meeting in their great hall and we are to be brought again before them, since we were given only until then to accede to their demands, death then being the penalty of refusal.

"Therefore they will take us out of here and back to the great hall. Then you and Vance and Fenton and myself must attempt to overpower them and get away in your sphere. It's our one chance."

Darrell nodded. "We'll do it, Kelsall," he said. "The first thing is to hide these two dead guards and our sphere."

He and I, turning toward the two dead flesh-creatures, grasped them and thrust them out of sight into one of the numerous store-rooms farther along the corridor, hiding them behind a mass of mechanisms. We

raced back then to our sphere and, entering it, I turned on its lifting power to send it humming up through the dusk of the great avenue toward its roof.

As it bumped against the ceiling, hanging there with the hardly audible hum of its mechanism just sufficing to keep the big sphere aloft there and out of sight, I stepped out and floated down to the avenue's surface. Then to await the returning guards, and with the ray-cubes of the two slain guards in our pockets, we turned back toward the door of the transparent cell that held Kelsall and Fenton, and hid outside in the corridor's feeble dusk.

Kelsall was saying, "Fenton and I were astounded when we heard your combat in the corridor and saw you two fighting with the guards. How did you ever get down here?"

Darrell related what had happened since the kidnaping by the shaft. Kelsall and Fenton listened in astonishment to his tale of our wild journey down after them and when Darrell had finished Kelsall shook his head.

"I never imagined that you two would venture down here after us," he said. "But you have done it and if we four can escape we can bring to our own earth a warning, at least, of this menace."

"But warning of what?" I asked swiftly. "What are these strange flesh-creatures, Kelsall, what are their plans? Why should they leave this hidden world? What were the four great light-shafts that they sent up through earth's shell? What was that great shock that made all this world reel a few minutes ago?

"We heard you and Fenton reply to the creatures in their own whistling speech there in the great hall. You must know the answer to some, at least, of these mysteries!"

KELSALL was silent for a moment, regarding me with a strange solemnity through the transparent door. When he spoke his voice was grave.

"I know the answers, Vance," he said. "You saw us captured and thrust into one of their spheres. I saw you rising to come to our aid then but waved you back because I knew that you would be captured like ourselves or killed.

"We were thrust into one of the great spheres, closely guarded, and then our sphere and the score or more that were about it there on the ground rose and then sank into the shaft, leaving the hundred or more patrolling watchfully above and three to guard the mouth of the shaft on the ground about it.

"Down into that great shaft we dropped at terrific speed with the light-beams of all the spheres flashing, whirling down at such terrific velocity that I knew within moments that we had dropped many miles beneath the surface. Then came the growing heat about us, and the glow showed us we were shooting down through that awful light and heat. Finally they moved a knob and the wall and the sphere became cooler.

"Between the great shaft's molten walls and out at last into this vast space in the interior of earth we moved. Our spheres sank down toward this world and through the opening in the great hall's roof.

"Our spheres poised at the edge of the great balcony, our guards leading us forth onto it. They kept close hold upon us and as we stepped out of the sphere we saw why. The smaller force of gravitation upon this world, less even than it seemed it should have been, made every one of our efforts to move send us floating upward.

"The great hall was quite empty but soon there came to survey us the twelve flesh-creatures who form what might be termed the highest executive committee of this strange civilization. The foremost spoke to us in their whistling speech but of course we did not understand.

"He turned then and gave an order to our guards, who led us away at once. We walked quite naturally when held down by them. They led us to this storeroom. Its lock made it suitable as a prison-cell for us.

"Here, after a little time came three flesh-creatures, bearing a conical projector of some sort connected to masses of intricate apparatus. They bound us tightly with metal thongs, flat on the floor, unable to move a muscle. Then they turned this projector upon the upper portion of the back of my skull.

"I felt some invisible but powerful force pouring from that projector into my brain and then I felt comprehension of the whistling speech-sounds in which our hosts conversed coming upon me!

"You know that the brain is the organ that stores and acquires knowledge, that each new thing we learn is registered by an infinitely subtle change in a portion of its structure.

"If we knew the exact change produced in the brain by learning a certain fact and could take someone ignorant of that fact and make that exact change in his brain, that person would at once know that fact perfectly without ever having heard of it. It would simply mean that the fact had been impressed upon his brain directly instead of indirectly through his visual or auditory nerves.

"It was this ability, one foreshadowed even in our own world by certain experiments of our psychologists, which the flesh-creatures were using to give me an instant and perfect understanding of their whistling speech.

"When they turned off the force finally, when I arose, I understood their speech perfectly and could speak it to them in a crude fashion, my human vocal apparatus not being capable of making all of their whistling sounds. In Fenton too the same thing had been accomplished. Then the flesh-creatures who had wrought that swift change in us, were conversing at once with us.

"They told us that within a few hours we should be taken back before the ruling twelve now that we could speak to and answer them. They would question us concerning all phases of life on the earth above—also what had brought us to the exact spot on earth's surface where they had driven their great shaft upward.

"Fenton and I told them little. We did, though, in the guise of conversing with them openly, strive to gain information as to the mysteries of this strange world and its peoples and their plans. And they, seeming not to care if we learned, told us openly enough of the history and the purpose of their great flesh-creature races.

IT WAS with amazement that we heard their history. For these flesh-creatures existing on this spinning world were, we learned, older by far than any race on earth's surface, and their world a world older than the great shell of earth that enclosed it!

"Unthinkable ages ago, they said, our sun moved through space, with no planets, a giant flaming single sun. Eons it moved alone until a time when there approached, out of the galaxy's vast swarm of stars, another star, a sun heading through space in the general direction of our own. It passed our sun at a vast distance, yet one which was small compared to the usual distances between stars.

"As they passed, the tremendous gravitational attraction of the two suns raised upon each other great tides, colossal flaming tides of glowing gases. So immense were those tides that when the two suns finally receded from each other the tides they had raised did not recede but broke loose entirely in flaming masses from their giant suns! And as those vast flaming masses broke from our own sun they began to circle around it, held still within its group.

"In this tale of the flesh-creature scientists, indeed, I recognized one of the theories of the birth of the planets put forward by our own scientists, by Chamberlin, Moulton, Jeans and Jeffreys. And, the flesh-creatures said, those great flaming masses began to condense with time into planets, spinning about their sun.

"There were, though, immense masses of flaming gases still free, still moving about the sun themselves, but planets had been formed. The planet that had formed where earth is now was much smaller, was in fact this very hidden world!

"However, as I have said, vast masses of loose flaming gases still moved through the solar system, condensing swiftly into meteoric materials. These great clouds of meteoric matter began to be caught and held by the new-formed planets.

"Neptune caught only enough to form one moon which revolves about it, Uranus enough to form at least four moons. Saturn, toward which great masses of meteoric material chanced to be flying, gripped enough to form around itself the giant rings as well as a number of large moons and some smaller ones.

"Jupiter, too, gripped much of the material, forming four great moons and a number of smaller ones also. Between Jupiter and Mars a great belt of this meteoric material formed of itself, turning about the sun and existing there now. Mars, being out of the path of most of the great meteoric material masses, caught only its two little moons, hardly greater than meteors themselves.

"But this little world, that revolved where earth now lies, was in the path of great masses of the wandering matter and so quickly caught immense quantities. They formed about it much as similar masses had formed about Saturn, encircling it completely without touching it.

"But since this world was so much smaller than Saturn they encircled it on all sides as well as on one plane, encircled it as a giant *shell* instead of as a *ring!* They formed about it, indeed, a colossal globular shell, hiding it forever from the sun and from outer space. This giant spherical shell that has a thickness of 1,000 miles is our own earth."

CHAPTER X

How the Hidden World Evolved

NOW THIS vast earth-shell," Kelsall continued after a pause, "was of necessity almost wholly molten and fiery. But the world hidden within it, which had formed before the forming of the shell, had already condensed and cooled somewhat.

"As it cooled and solidified still farther its elements and vapors cooled into water, into seas that swept its surface while the vast shell of earth around it was still glowing and molten. Air formed too from those condensing vapors, an atmosphere that filled all the vast space inside earth.

"With air and water, with the ceaseless light and heat beating upon it from the great molten shell of earth enclosing it, there came at last to form upon this hidden world the first crude forms of life.

"In the seas they formed—beginning with the first jelly-like organisms evolving out of the changing sea-silt's elements—the first protoplasm that evolved slowly as ages passed into higher and higher forms until at last many creautres moved upon the lands of this central world while the great earth-shell was still almost wholly molten.

"Another great mass of the meteoric material had been caught by earth as it wandered through earth's orbit, and that mass had condensed into earth's circling moon. But though earth's outer surface gradually cooled and solidified, though there began upon its outer surface the same condensations of vapors and formation of seas, its inner surface was still molten, flaming, and in the heat of that inner surface the hidden world flourished, lit and warmed perpetually by the molten sphere about it.

"At last, out of the great races of strange creatures that moved on the hidden world, there rose to dominance the one race of these flesh-creatures. They were the product of ages of evolutionary changes that had taken place here on the hidden world and with more and more intelligence came to rule it.

"Long before any life appeared on earth's surface the flesh-creatures had waxed to great power and intelligence. They built strange cities, cities that grew even larger as their numbers increased until at last they were forced to cover all their world with a single great city or mass of structures.

"As time went on they raised over that city another level of structures, building it as much as possible from transparent metal to allow the level beneath to receive some share of the light and heat from the enclosing molten shell. Through the centuries, they had added level after level to their city, their world, until at last all of it lay as it now lies with a hundred great levels on which swarm the masses of the flesh-creatures.

"Far above on earth's surface had come the first stirrings of life also, the first forming of changing, ascending species that in time were dominated by the rising races of man. But the flesh-creatures had no interest in the conditions of earth's surface and so never ventured out to it.

"But at last, after age upon age of safe and uneventful existence upon their hidden world, the flesh-creatures came to realize that the end was at hand, that soon their world would perish and with it all their races. The reason was quite logical.

"When this smaller world was first enclosed by the earth-shell it moved about the sun in the same orbit earth follows now but did not rotate at all. This earth-shell, however, spun from the first, formed as it was by the meteoric masses rushing whirlpool-wise around the smaller world. When it was first formed, earth consisted of a great shell which rotated once each twenty-four hours, just as it does now, and a hidden world inside that did not rotate at all.

"But gradually in the following ages this hidden central world began to rotate also! The great shell rotating around it pulled at it with vast gravitational attraction as it revolved, the gravitational attraction of shell and central world being in reality a connection between them.

"Because of that connection, just as though it were solid and visible, the hidden inner

world began slowly to rotate in the same direction as the rotating earth-shell around it. As age followed age the rate of its spin steadily increased, accelerated always by the constant pull of the spinning earth-shell around it.

"And so at last, short months ago, it became evident to the flesh-creatures that their inner world was spinning at almost the same speed as earth's shell around it, that it would spin faster and faster still as time went on until the spinning must end in its own annihilation!

"The flesh-creatures calculated that within months the hidden world could no longer hold together! You must remember, the gravitational attraction of this small hidden world upon its own matter was small in the first place and its matter was under the ceaseless gravitational pull of all the great shell of earth around it.

"Now with that shell pulling its matter outward with great force, with the increased centrifugal force of the spinning world tending ever more strongly to hurl its own substance outward, it was plain that before the hidden world could reach a speed of rotation equal to that of the earth shell around it, it would break up! It would break up, like a bursting flywheel, all the matter flying apart in tremendous masses against the molten inner shell of earth!

THAT meant annihilation for the flesh-creatures and all their world. So they strove with all their power and craft to devise some way to escape annihilation. They decided, at last, that but one method of escape was open to them—and that was to surge up to the surface of earth's great shell in all their hordes.

"There was another group among them that believed that the speed of rotation could be lessened and their world saved. They wanted to brake the speed. They did not believe that their race could exist on the surface of the earth where many conditions would be different.

"Making use of their knowledge they set to work tampering with atomic structure to get forces powerful enough to stop the mad rotation. And they had almost succeeded when they found that the atomic energy they had released was causing convulsions in the structure of their world.

"Each disintegrating atom was affecting its neighbor and with great rapidity their world was being slowly shattered. The rumbles that you heard were signs of it. They are becoming more and more severe.

"Imagine these creatures, finding that instead of thousands of years in which to prepare for the natural ending of their world they had literally advanced its date so that it hangs over them ready to end them any moment. When the end will come no one knows.

"The earth-shell, they knew, would not be affected by the bursting of the hidden world inside it, save for a severe shock. And upon earth's surface they could live, for though they would be able to move there only with great effort, they could use their mechanical ingenuity to spare them muscular exhaustion. At any rate, their last chance lay in emigrating *en masse* to earth's surface at once.

"With their instruments of distance-vision they had, more than once in past centuries, gazed upon earth's surface, had seen the swarming races of men. They knew that with their great spheres and deadly rays they could annihilate mankind.

"So they began their plans to drive a great shaft upward through earth's shell by using a great disk-projector which would send upward from their world a giant yellow beam that would instantaneously cut a shaft through the earth. They erected their big disk-projector exactly upon the equator of their own inner world, so that its beams would send a shaft up exactly upon earth's equator also.

"Used as they were to the ceaseless light and heat of their world, the flesh-creatures planned to take no chances of emerging in earth's colder regions. All was ready to pierce their shaft upward but one problem faced them still—at what exact spot on earth's equator should their great shaft emerge?

"It was a problem of great importance. If their great shaft were driven suddenly upward in a town or city swarming with men the alarm would spread over all earth. Before the flesh-creature hordes could rush up human forces might gather about it to prevent them.

"And, too, should they run their shaft up through the ocean's bed, a vast volume of water would rush down it and, spreading out *inside* earth's shell, would cause through

contact with the molten inner surface great cataclysms of exploding steam that might well wreck all earth.

"It was vitally necessary that their shaft be driven up through some continent, at an uninhabited spot on earth's surface. To make sure that their shaft would be sent upward at such a spot they decided first to make use of the distance-vision instrument I have mentioned.

"That instrument was one which projected an intense column or shaft of blue light for any distance through any form of matter. It projected also a small beam of white light that was supersensitive to all changes of light about it, the white beam appearing as a white circle or spot of light near the top of the blue column of radiance.

"Thus the white circle or beam was in effect a great eye, which recorded upon itself a swift and ceaseless picture of all things about it. It transmitted this picture downward in the form of linked vibrations through the blue shaft of radiance to instruments that enabled the flesh-creatures operating it to see things as though with that great white eye of light.

"So, beside the great blasting-beam disk which they erected on their hidden world's equator, the flesh-creatures set up a smaller disk to project the blue vision-shaft upward through earth's shell. You must have seen the great and small disks when you came down over the hidden world.

"Then, but a few weeks ago, they got into operation. They turned on the power of the smaller disk and at once a brilliant shaft of blue radiance sprang upward through the great shell of earth to emerge upon earth's surface at the equator.

"That column of blue radiance, appearing as it did in the native village north of Kismaya, was the first of the great light-shafts that puzzled us on earth.

ONLY for a minute or so did they keep that blue light-shaft turned on near Kismaya. In that minute they were able to see that the spot was one in which were many natives, many men. It was, clearly, not a suitable place for their great passageway, so they turned off the blue ray and it vanished above.

"They did not need to move their disk around their own hidden world to shoot the light-shaft up at a different spot. They needed only to wait until the next spot selected, a fourth around earth's equator, moved directly above their disk. As I have said, their hidden world spins more slowly than the earth's shell about it.

"By waiting for a number of days the next selected spot on the earth-shell's equator would be directly over their disk. Within twenty days and some hours the second spot was directly over their disks, since it took that length of time for the swifter-spinning earth-shell to gain a fourth of a rotation on their own spinning inner world.

"So when the moment came, they again sent the vision shaft stabbing upward. This time it came through the Pacific on the equator just south of Moram Island.

"They could see that to drive a shaft upward there would mean the downrush of great waters. So they snapped out their shaft and waited another twenty days and six and a half hours until the earth-shell around them had gained another quarter-revolution upon their inner world.

"Then they sent a third great light-shaft stabbing upward, which emerged in the broad open expanse of the Pacific, on the equator just ahead of the *Callarnia*. They saw that this third spot also was impossible and prepared to wait until the fourth designated spot would be above their disks.

"Meanwhile every effort of the flesh-creatures' hordes was being used to construct the mighty fleet of spheres that would carry all of them up to earth's surface. And meanwhile we four, on earth's surface, had resolved to solve the mystery of the strange light-shafts and were making our way to the spot where we had calculated that the fourth would appear.

"Our calculations were right as you know. When the interval had elapsed the flesh-creatures sent their fourth light-shaft stabbing upward. Through it they saw land uninhabited and wild as they desired.

"They had found their required spot. At once they turned on the other titanic greater disk, the giant disk that sent a colossal yellow disintegrating beam stabbing upward! That beam drove a great shaft straight up through earth's shell, almost instantaneously before our eyes.

"After the shaft was blasted upward, scores of spheres shot up it at once, their

light-beams flashing up to earth's surface, the first of all the great hordes of flesh-things that were to follow!

"For though the shaft had been pierced up and all was ready for the flesh-things to pour up through it, their mighty fleet of spheres was not yet quite finished, would not be finished for another day or two. So these hundred or more spheres were sent up to guard the great shaft's mouth, to prevent any who might discover it from giving the alarm or trying to wreck the shaft itself.

"Fenton and I, running from them toward the clearing's tip, were seen. Instantly they were after us, captured us, and took us down as prisoners to this earth within earth. When they brought us down here, their twelve rulers ordered them to give us at once knowledge of their speech so that they might converse with us.

"This they did by means of their strange brain-alteration mechanism and when we found ourselves able to understand them they told us these things concerning their history and plans.

AND it was a tale, that, which Fenton and I heard with growing horror. We saw that these beings could do what they planned, could surge up onto earth's surface in their numberless spheres and annihilate mankind. Our horror was deepened when we learned how near to earth this doom was. The final preparations were even then being made, the last spheres of their tremendous fleet were being completed.

"Within hours the hordes of flesh-creatures will be rising upward through the mighty shaft onto earth's surface. Once they have passed up through the shaft, once they have emerged on earth's surface, no power can stay the doom that is mankind's.

"Even as the flesh-things told us this there came a warning of the cataclysm that was almost upon them. The whole hidden world seemed to reel and quiver violently, we heard a tremendous distant grinding and roaring sound. When that died an alarm spread across all the hidden world.

"Later we learned from the flesh-things guarding us what had happened. A great section of this hidden world had gone flying out toward the molten encircling earth-shell about us! It was another such great throwing-out of part of this inner world's mass that caused the similar shock and alarm but a little while ago.

"That first great shock, indeed, made the swarming flesh-creatures in it redouble their efforts upon their great fleet of spheres. For they knew that even with the greatest efforts they would be able to rush upward and escape from the hidden world but a short hour or so before its final breakup comes.

"So they've been working furiously at the great spheres. Our guards told us that we had nothing to hope from above, that the hundred spheres were still guarding the mouth of the great shaft on earth's surface. We never dreamed of your being able to get down here to us.

"We were told also that another hundred spheres had been sent up to relieve the first hundred, with the first party coming back down. For though the spheres can run for great periods, though the flesh-creatures with their fatigue-neutralizing fluid need neither sleep nor rest, the projectors that shoot forth the deadly yellow rays must be charged with new stores of electronic force whenever exhausted.

"Hardly had they told us this when we heard that great whistling call, which was the signal summoning the officials of each level to the great central hall. Fenton and I were taken there also.

"There, behind the great balcony, we heard the leader of the twelve rulers speaking to the assembled officials, telling them that the great fleet of spheres was almost finished but that they must put every effort into their completion within the next hours.

"He told them it had been calculated that within twenty-four more hours, almost exactly, the breakup of their world would come, that they must needs have the spheres finished and be rushing to earth's surface before the cataclysm came."

CHAPTER XI

What Hope?

THEN, at his order, Fenton and I were led out onto the balcony," Kelsall continued. "We never dreamed, of course, that you two were hidden in one of the spheres

and watching us. When the leader spoke to us it was to tell us that our world was doomed and that our only hope of life lay in the mercy of the flesh-creatures.

"Within a score or more hours, he said, all the flesh-things in their thousands of spheres would be rushing up to earth's surface, to spread out over it and to loose upon man annihilation man could not resist.

"He said they desired to strike their first blows directly at the greatest cities of earth, to annihilate those cities and all in them with their first attack. It would save time for them, therefore, if we two were to pilot their great attacking forces to those cities when they emerged upon earth.

"To that proposition we answered only with flat refusal. Then the great leader of the flesh-things told us that death would be our lot if we continued in our refusal. He said the rulers and officials of the flesh-things would assemble again in the great hall just before the invasion ten hours away.

"If we continued to refuse then, he said, instant death would be ours. To his words, though, both Fenton and I spoke only a single word of refusal. So we were brought back here into this cell.

"We heard and felt soon after another great quivering and shock of the world about us, knew as we heard the resulting alarm that another mass of this hidden world's substance had been jerked from it.

"Then came the combat in the corridor outside and we saw you. So now you know what we have seen and learned in this hidden world."

Darrell and I sat silent in the dusk of the corridor outside the transparent door as Kelsall's voice ceased. I could see that Darrell's face was as white and tense as my own. Then his voice came, sounding strange and thin to my ears.

"Is there any hope of halting this thing?" he said.

Kelsall slowly shook his head. "I think not. Even if we escape to earth's surface the hordes of the flesh-things in their spheres will be pouring up behind us."

"But we could at least warn the peoples of earth of the impending attack before that attack falls upon them!" I exclaimed.

Kelsall nodded. "That is the one hope left us, Vance," he said. "Yet even if we can carry that warning to mankind I do not think, myself, that man can stand before the terrific attack that these creatures will loose upon earth. But as it's our one chance left we'll put our lives on it."

HE WAS silent as were Darrell and Fenton and I there in the dusk of cell and corridor. We could glimpse vaguely through the transparent walls and levels about us, the rushing movements of the flesh-creatures about us.

It seemed to us that the great sphere-fleet had been completed, since the clangor of metal upon metal from lowest levels was no longer reaching us. Apparently the flesh-things were engaged in loading into their spheres the equipment and weapons which they were to take with them.

We saw some of them busily charging the great ray-containers, fitting weapons into the spheres. Others were swiftly disassembling into sections the great cylindrical machines which manufactured their food liquid and the other mechanisms that turned out their metals, loading the disassembled mechanisms also into their countless spheres.

Once Darrell and I were forced to shrink back from our position in the corridor as a group of a score or more of flesh-creatures raced along the avenue, swiftly selected the mechanisms they desired from the .store-rooms beyond us and loaded those into other spheres. But they had passed beyond us and out of sight in a moment more, ignoring the greater part of the mechanisms and materials stored in the rooms about us. It was evident that they were taking with them to earth's surface only essential mechanisms.

While all this climactic roar of activity and sound went on about us we four remained there, Darrell and I outside that impenetrable transparent door, Kelsall and Fenton within it. Dark and strange were our thoughts as hour after hour sped by thus, as moment by moment the last hour approached.

For we knew that only when the guards came to take Kelsall and Fenton before the last great meeting in the great hall could we hope to rescue them. And we knew, too, that that would be but minutes before the assembled countless spheres and hordes of the flesh-things poured upward, so that even did we win clear to earth's surface by some miracle, the invading masses would be close behind us.

Once, though, there came a break in the ceaseless activity about us. That was when, without warning, another great shock shuddered through the world about us. The floor heaved beneath us as grinding sounds came to us from far away. The transparent metal roof bulged downward and cracked swiftly along one side, making us fear for the moment that a great section of it was coming down upon us. It held, though, and the great babel of cries of alarm died quickly.

"Another shock!" exclaimed Kelsall. "Less than a half-dozen hours now to the finish."

BUT the great quake that had just shaken their world seemed to have spurred the flesh-things about us to even greater efforts. Working furiously to load the last of their equipment into the great spheres, they rushed madly to complete their preparations.

For they knew, even as Darrell had said, that within a few hours their spinning world must burst, that they must escape up the shaft to earth's surface before that took place. Pressed by utter necessity, they tackled their last tasks like insane things.

With growing suspense we waited there as the last hours passed. One by one they dragged by until little more than a single hour remained. By that time the last preparations appeared to have been completed about us, for the wild clanging uproar of intense activity in all the hidden world's levels dwindled, then ceased almost entirely.

We could see the flesh-things hurrying toward the great spheres, which had been brought up from the lower levels and now filled all the levels about us apparently, though in the narrow corridors and avenues about us none were passing. We knew with growing tension that the time of our chance was approaching.

Then suddenly, through the strange silence that had fallen upon all the hidden world's levels, sounded a mighty whistling note that shrilled through the air from far away!

"The signal!" Kelsall exclaimed. "They're preparing to start upward. We'll be brought before them for the last time!"

"Then at any moment the guards will be here for you!" said Darrell. "Vance, you know what we must do?"

I nodded quickly, for we had evolved a plan by which we hoped to get our friends free and destroy the guards who would come to release them. A quick glance into the main avenue assured me that our own sphere was still hanging out of sight against the ceiling of this level. Then Darrell and I waited, crouching against the door of our friends' prison.

The silence that had fallen upon the levels of the world about us was almost complete, but we could see countless massed spheres filling with the last of the flesh-things. Other spheres, of officials or the like, were rushing toward the great hall to which the whistling summons had called them. Then there came the sound of approaching steps, of a group of flesh-creatures marching quickly down the avenue toward our corridor!

We leapt to the corridor's edge and peered down the avenue. Approaching us were eight great flesh-thing guards, armed with ray-cubes. Darrel and I hastened back to the door of our friends' cell and then with a great effort leapt upward. We shot up to the roof of the corridor, floating smoothly up toward it and hovering for a moment beneath it. There we reached swiftly toward the crack that had opened in the roof, hooked our fingers inside it.

Thus, hanging high in the dusk from the corridor's ceiling, we awaited the coming of the guards. We could have hung by one finger, so small was our weight against the lesser gravitation of this strange world.

We saw the eight guards turn into the corridor beneath us. They did not give even a glance up toward us, but as they paused before the door of our two friends' cell we heard whistling exclamations from them, exclamations as though of surprise.

Their leader was looking about him and he was evidently astonished to find that the two guards were nowhere to be seen. I feared that he was about to conduct a search for them, knew that such a search would disclose their bodies and thus frustrate our last chance. But apparently time was too pressing.

After another glance he reached toward the score of studs set at the transparent door's center. One by one he pressed them, in complex combination, until there came a sudden low hum of force from some mechanism set behind the studs.

Straight cracks appeared in the solid trans-

parent wall, cracks that outlined the door, and the leader reached forth and swung it easily open on its hinges, at the same time motioning Kelsall and Fenton to step outside. As they did so the eight guards stood before them, their ray-cubes retained watchfully in their grasp.

Darrell and I grasped the ray-cubes which we had taken from the guards we had slain. Quickly, with the little ray-opening pointing downward, our thumbs pressed the buttons that released the rays.

As Kelsall and Fenton stepped out among the flesh-creatures Darrell and I dropped smoothly downward toward the guards beneath! As we did so I uttered a quick, sharp cry.

Kelsall and Fenton had leaped toward the avenue and as the guards looked swiftly upward, Darrell and I pressed the button-controls of our cubes and sent our yellow blasting rays stabbing down among them!

THERE was a sharp little detonation from beneath and two of the eight guards beneath us abruptly vanished, annihilated by the rays! As Darrell and I fell upon them from above Kelsall and Fenton leaped back upon them. In the next moment we four earth-men and six great flesh-creatures were grappling in the narrow corridor!

They dared not use their own ray-cubes lest they annihilate their own fellows, and for the same reason Darrell and I had dropped our cubes as we leaped down onto them. We had, though, whipped our pistols from our belts and, using the heavy automatics again in club-fashion, were dealing blows with all our force at the creatures before us.

In the first stunning moment of surprise the fury of our attack staggered them, sent them reeling back against the wall, one of them beaten to the floor.

Only the immensely increased power of our earth muscles on this smaller world enabled us even to battle the monsters. But as it was we stretched one of them dead upon the floor with our terrific blows and struggled toward our sphere.

I heard a hoarse exclamation from Kelsall, saw that two of the creatures had gripped him. Instantly I was at his side. Then, with a terrific effort, we flung them back down the corridor toward the open cell-door!

We were on the point of making a swift leap up toward our sphere that hung at the avenue's ceiling when a hoarse cry came from Darrell. We whirled to see him pointing back down the corridor with trembling finger. Our five antagonists had grasped the ray-cubes from the floor and were raising them straight toward us!

CHAPTER XII

Intervention of Fate

IN THAT moment it seemed to me that the whole rushing scene of wild action had been converted into a tableau. Another moment would see the yellow rays leaping forth upon us. The end—

But as we stared at the cubes there came a sudden tremendous heaving and rolling of the floor beneath us that made the five flesh-creatures down the corridor stagger even as we! The shock made the section of roof or ceiling above the flesh-creatures, which was already cracked, crack farther, break loose and whirl downward! It crashed full upon the five flesh-creatures.

They disappeared beneath a great mass of transparent metal, four of them crushed to instant death, the other hurled backward as it struck him, knocking the ray-cube from his grasp! From across all the hidden world's levels, in which waited the countless spheres, rose a cry of alarm.

"Up to the sphere!" Kelsall cried wildly. "Up to the sphere and out of this world—its final hour is almost here now!"

Our leaps sent us whirling up smoothly through the dusk like swimmers rising to the surface. We caught the edge of the sphere's open door, drew ourselves inside. I leaped to the sphere's controls. Its mechanism was still humming slightly, with the power required to keep it aloft.

As Kelsall slammed the door I gripped the two control-wheels and sent the sphere leaping forward and downward along the great avenue. But even as I did so Darrell cried out behind me. I spun the sphere half-around, glanced for an instant behind us, saw that a score of other spheres were rushing upon us!

My first wild impulse was to send our

own sphere leaping forward in mad flight but I realized that the spheres behind us were not pursuing us but were of those rushing toward the great central hall in answer to the whistling summons that had sounded moments ago.

To flee before them would be to excite their instant suspicion—so, as they drew closer, I held the sphere steady with them. Kelsall and Fenton gazed tensely at the spheres behind us and Darrell was ready at the ray-controls. All of us crouched down to avoid the gaze of any who might chance to survey us.

"They're going toward the central hall," I said to the others as we shot onward among them. "They're taking us with them!"

"Keep with them then!" Kelsall exclaimed. "If we leave them now it will arouse their suspicions at once!"

Fenton cried, "The wells are shut to us by the massed spheres gathered around them, waiting to go! We'll have to try to escape from the great hall itself!"

What Fenton said was true. About the wells that led upward through the hidden world's levels were gathered countless ranks of motionless spheres, waiting the command that would send them upward. To force our way through them and up out of a well now would be to challenge instant discovery.

So, with dread growing in my heart, I kept our sphere racing onward with those about it toward the great hall. All about us stretched the massed ranks of our enemies. A tremendous silence seemed to reign over all this world as its last great hour approached.

Our rushing sphere and those about us neared their goal, the great high door that led from the fifty-ninth level out over the balcony into the great central hall. One by one the spheres shot through and as our own followed I was aware of the twelve rulers gathered on the balcony, surveying the spheres.

AS UNOBTRUSIVELY as possible, I sent our sphere worming forward and upward slowly through the thronging spheres about us. From the opening of the sixth level around the hall, the last of those summoned spheres rushed into the hall, taking their places among the masses around us. Hope was flickering stronger in me but suddenly it died.

The centermost of the twelve creatures on the balcony, the leader of the twelve rulers, stepped to the balcony's edge. And as he did so all the spheres in the great hall abruptly ceased their restless movements and hung motionless, awaiting his words.

I halted instantly the upward movement of our own sphere with a groan on my lips. For I knew that with all other globes motionless in the great hall about us our own, striving to make its way upward to the opening, would be instantly noted and we as instantly discovered.

Meanwhile the flesh-leader who had stepped to the balcony's edge was surveying the assembled spheres before him as we had seen him do before. And we noted that beside the balcony hung a single sphere which was of black instead of the gleaming metal which formed all the rest. It waited there with door open. It was, we comprehended at once, the sphere in which the twelve rulers on the balcony would lead the others

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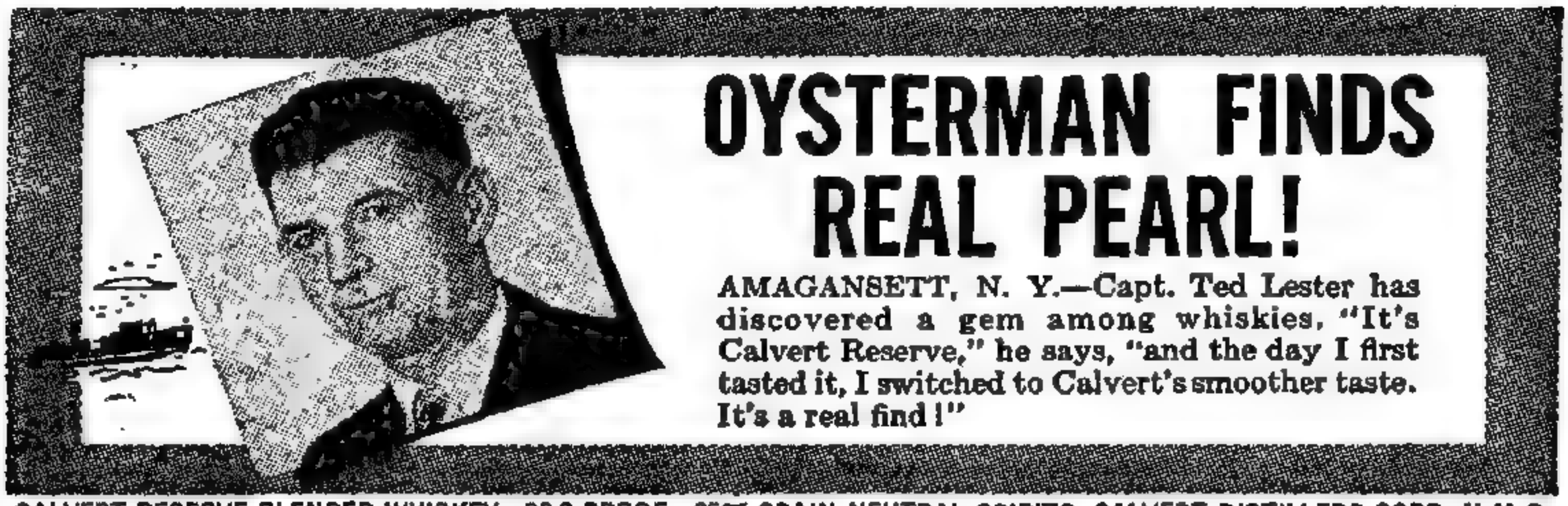
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REAL PEARL!
AMAGANSETT, N. Y.—Capt. Ted Lester has discovered a gem among whiskies. "It's Calvert Reserve," he says, "and the day I first tasted it, I switched to Calvert's smoother taste. It's a real find!"
CALVERT RESERVE BLENDED WHISKEY—86.8 PROOF—65% GRAIN NEUTRAL SPIRITS. CALVERT DISTILLERS CORP., N.Y.C.

up through the shaft to earth's surface!

The creature began speaking in his strange whistling tones. And as we listened it seemed to me, despite myself, that there was something of a grandeur of majesty of power that was none the less real though inhuman.

Awed despite ourselves we listened and as we listened Kelsall swiftly translated the words of the thing on the balcony.

"He says," whispered Kelsall rapidly, "we flesh-creatures are on the eve of the most important event in our history. For numberless ages we have dwelt upon this world of ours, this world that lies at the heart of the great shell of earth. But now we face annihilation.

"All about us awaits the great fleet of spheres that holds all our races and in that fleet we are about to leave this inner world of ours forever, to burst out upon the outer surface of earth's shell and take possession of it for ourselves.

"You have been told that that outer surface is peopled and you have seen the two prisoners of those peoples brought down here, prisoners even now being brought here for a last hearing of our demands. The peoples of earth's surface have neither the science nor the weapons our older race has developed and they cannot stand before us.

"The word which we leaders give you now, give to all our spheres and hordes, is to strike out with all power to annihilate all alien peoples from the moment that we emerge onto earth's surface.

"Not one of them must we leave living upon the face of earth! For it is only by wiping out entirely every vestige of life upon earth's surface except ourselves that we ourselves can bring all earth's surface to our will and can hold it for ourselves forever."

The creature upon the balcony paused and as Kelsall finished his quick whispered translation I saw his face and those of Darrell and Fenton white and grim with horror.

A wave of wild excitement seemed to surge through all the occupants of the massed spheres about us. They swirled and tossed and from their occupants there came great whistling cries that merged into a single roar of strange voices. Fenton turned toward us, his face tense.

"You heard him say that the two prisoners were being brought to this hall!" he exclaimed. "That means we must escape from here now if at all!"

"We've got to chance it!" Darrell agreed. "They'll learn in moments now that their prisoners have escaped!"

I GRIPPED the two control-wheels, then looked upward. A great mass of spheres still lay between us and the roof-opening high above. But in their occupants' excitement those spheres were moving jerkily about, bumping to this side and that against each other. It was truly our last chance to get out of the great hall.

So, carefully and slowly, I sent our own sphere rising upward again, up through the swarming globes above us toward the great opening. With Darrell and Fenton and Kelsall as tense beside me as myself, I kept our globe slowly rising, bumping each moment against the spheres above and about us!

Up—up—the moments in which we rose saw hope rising stronger within us, for we knew that seconds more would bring us up to and through the opening.

Suddenly a wild whistling cry rang out from the great balcony. A great cry of alarm at which we turned to see. Upon the balcony by the twelve rulers reeled a single flesh-creature that had staggered out through the door. We recognized him instantly, by his battered appearance, as the guard who had escaped the falling metal that had destroyed his fellows. He was crying something in his whistling voice, and as he did so there came another and greater cry from the ruler, and an uproar of wild cries and confusion seemed suddenly to break out inside the great hall.

Kelsall whirled toward us, his face white. "That guard!" he cried. "He told them we escaped in a sphere—they'll find us here in seconds, now!"

Even as Kelsall spoke the hanging spheres that had poised about us rushed in confused swarms about the great hall, their occupants peering into each other's spheres and flashing their light-beams, searching for us! Then one just beside us flashed its beam through our window and a whistling cry of discovery went up as the beam caught and held us in our own globe! We were discovered!

"Up to the opening!" Darrell yelled beside me. *"Smash up through them to the opening, Vance—they've found us!"*

But even as he shouted I whirled over the

control-wheels and sent our sphere rushing at top speed upward! *Crash-crash*—into the spheres above us we drove, flashing bullet-like up among them as they whirled in wild confusion! Beneath us, from the sphere that had discovered us, a quick ray of yellow death seared upward.

Before it could find its mark we were above it and the yellow ray struck two spheres beyond us, annihilating them instantly! Still we crashed upward among the swarming spheres until I saw that a flat solid mass of them had grouped themselves above us to bar our progress. Since to crash into such a mass squarely was to annihilate ourselves I sent our sphere laterally dodging like light among the swirling scores of spheres to our right!

The mighty hall was in such wild confusion that all things about us seemed a mad panorama of wildly whirling spheres as I drove our own globe sidewise. The massed spheres in the great hall were swarming furiously and aimlessly about like a great maddened swarm of aroused bees!

They dared not loose their rays upon us lest they annihilate their fellows as one ray had already done. But no such consideration held us and as we shot sidewise to avoid that solid mass of spheres above us I heard Darrel's yell of defiance when he gripped our ray-control!

I glimpsed our sphere's rays driving out to right and left, above and beneath us, from all six ray-openings, cutting dazzling yellow lanes of death and nothingness through the whirling spheres about us as we shot sidewise and upward!

That moment of rushing movement and battle seemed extended indefinitely. Though our sphere was leaping upward toward the opening like a bullet it seemed to me to be floating slowly upward.

I saw the twelve rulers on the balcony far at the great hall's end, rushing into their own waiting sphere. Then, as we flashed upward through the swarms around and above us, I could hear all around us the sharp detonations of the striking rays that Darrell was loosing on all the globe-ships within range.

Now the flesh-creatures' rays were stabbing from all sides toward us, regardless of effect. But before they could reach us we were beyond them, rushing madly up through the swarming spheres until the great circular opening loomed just above us!

Wild cries from Fenton and Kelsall warned me that a half-score of spheres now hung within it, barring our path! Before we could use our own rays upon them their rays must find us.

I staked our lives on one last mad chance, jerked open the speed control to its utmost! The next instant we were hurtling straight toward the massed spheres. In another moment, like a meteor, we crashed squarely into them!

CHAPTER XIII

The Doom of a World

THERE was an awful reeling shock that flung us all sidewise, a great grinding of metal on metal. Then, as I staggered up again, I saw that our sphere was *through*, was rising from the hidden world's surface into the glowing light of the vast molten shell about it!

Chance had led us between two of the spheres and instead of annihilating ourselves our sphere's curving metal sides had forced them apart, allowing us to drive up between them, up through the great opening!

"Straight up to the shaft!" Kelsall screamed above the rush of winds and the hum of our sphere. "Straight up to the shaft, Vance—they're after us."

Mighty masses of spheres were pouring up from the gleaming surface of the spinning hidden world, were pouring up through the great opening through which we had smashed. Out of all the great wells that yawned here and there upon the surface of the world beneath us! It was the gigantic invasion of the flesh-things, surging up toward earth's surface at last!

It was their great armada of conquest and in the van of the swiftly-rising spheres leaped the great single black sphere of the rulers. Behind it swarmed the swiftest of the others in pursuit. Then came the countless masses of their globes, pouring up still from the hidden world.

"They're overtaking us!" Kelsall exclaimed as he gazed tensely upon the rush-

ing spheres beneath us.

I had already seen it was so. For our own sphere, battered as it was by our wild crash upward through the swarming globes of the great hall, was not equal in speed to the unharmed spheres that were rushing up after us.

Up—up—my brain reeled as we drove upward at tremendous speed with those countless pursuers even more swiftly after us.

The dark opening of the great shaft came into view above us. The glow of the molten fires in which the opening yawned beat fiercely upon us. I opened the refrigerating controls.

As we came closer to the great surging currents of the slow flowing molten masses, I heard an increasing roar of thunderous sound, the awful roar of the flowing sea of molten rock. Then suddenly there came a cry from Fenton and as I glanced back I saw yellow rays stabbing up toward us from the pursuing spheres close beneath us.

They fell short, though by little, for as yet the pursuing five hundred had not drawn within effective range. Swiftly, though, they were coming closer, were overtaking us, racing upward toward the roaring molten sea that loomed above us!

I felt the cold grip of despair closing upon my heart as we rushed over the last few thousand feet toward the round opening. I knew that Kelsall was right, that escape was impossible.

The five hundred foremost spheres were close beneath us and though they had ceased to loose their rays for the moment, unable to perceive us against that awful glare from the fiery ocean above, I knew that they were overhauling us still. Once in the darkness of the shaft's upper portions they would blast us from existence with their rays.

With the passing of our last hope something seemed to snap within me. I uttered a hoarse cry of defiance, gripped the control-wheels in my hands and then, as our sphere shot up into the shaft's great dark opening at last, I brought it to a halt, swung it around so that it hung in that opening motionless!

It hung just inside the shaft's opening with the flaming molten sea flowing and thundering all about it, facing the spheres that were rushing still upward toward us from beneath!

"No escape for us!" I cried. "Then no escape it is—but we'll not meet death fleeing up this shaft!"

"You're going to—" began Kelsall, but my mad shout cut him short.

"We're going to hold these spheres and flesh-things out of this shaft while we live! We're going to hold them back from the earth's surface!"

A SINGLE stunned silence followed and then the shouts of Darrell, Kelsall and Fenton joined my own. All about us was the thundering sea of molten rock, whose awful glare beat fiercely upon us, whose great heat was kept from us by the refrigerating controls!

The shaft was five hundred feet in diameter, so that the area to be guarded to prevent the spheres from rushing upward was not large. As I crouched there at our sphere's controls, Kelsall and Fenton were tense at the window, Darrel hunched over the ray-control. We saw that the five hundred foremost spheres beneath had glimpsed us halted in the shaft's opening, had themselves halted beneath us, the black sphere of the rulers at their head.

We could see their occupants peering upward, knew that against the awful glare all about us they could not gain more than a flashing glimpse of our own sphere. As we hung there amid the roaring molten fires of earth's inner shell, there was a pause. Then suddenly, at some swift order, the five hundred spheres shifted to a long column and drove at full speed toward the shaft and our sphere inside it!

In an instant the spheres of the column's head were looming great beneath us but then Darrell pressed swiftly upon the studs in his hands and down from our sphere there stabbed swift yellow shafts of deadly power. They clove down through the spheres of the uprushing column and with a great detonation shot scores of them into nothingness! As they did so, as the rays of the uprushing ships stabbed in answer toward ourselves, I sent our sphere leaping to one side of the shaft and from this new position our rays drove paths of instant annihilation down through their huddled, disorganized mass!

Before that awful fire from an enemy whom they could scarcely glimpse a third of their five hundred spheres were annihi-

lated by our down-leaping rays. They reeled back, shattered from the awful blow we had dealt them!

I heard the exultant cries of Kelsall and Fenton, saw that the black sphere of the flesh-thing rulers had moved to one side, that in the spheres beneath was a great confusion. A moment more and those great far-stretching masses of spheres halted beneath, holding formation thousands of feet beneath us in the molten sea in whose single opening we hung.

Then up from them rushed others to replace those we had destroyed. As these and the survivors of the first attack formed again into a column, they hung briefly out of range beneath us. Then at full speed they came leaping up toward us, their yellow rays stabbing up even before they came within range. But again they were loosing their rays blindly, dazzled by the awful glare about us. The instant they were within ray-range our own deadly beams were stabbing down again among them!

There came to us over the awful roar of the fires about us the detonations of our striking rays and we could see scores upon scores of the uprushing spheres flashing into nothingness. We could see their column reeling aside, scores of ships driving in that wild moment into the molten seas about our shaft and perishing there instantly in bursts of flame.

"We're holding them!" cried Darrell as the second shattered column reeled downward. "They can't get at us here in the shaft!"

"And the world below—look!" shouted Kelsall. "Another great mass of matter is breaking from it!"

With another great grinding roar, a large section was gouged suddenly out of the gleaming levels of the secret world, was hurtling out to strike with giant concussion the molten encircling shell not far from our great shaft's opening.

The doom of the hidden world was at hand within minutes. The sight seemed to act like a great spur of fear upon the massed spheres beneath that held all the flesh-things. At some unseen order from the rulers' black sphere, hanging to one side, scores, hundreds, formed swiftly into another mighty column and again rushed with suicidal fury toward the opening in which we hung!

As they came up within ray-range of us again with their few foremost spheres' rays flashing upward, our own rays shot again among them, stabbing down through the long solid mass, cutting instant and mighty lanes of annihilation. Still, though heedless of the death before them, the remaining spheres rushed up, hoping to catch us with one of their wildly-whirling rays.

But as they came within range of us our deadly beams were annihilating them, our sphere leaping from side to side in the shaft to avoid their own. Then with a scant score left of the hundreds of spheres of the third column, the survivors were reeling downward.

FOR a third time our sphere had driven back their attack, had sent their shattered column reeling back down from the shaft they sought to enter. As we hung there amid the thundering fires Kelsall and Fenton and Darrell and I were shouting like mad things, were crying out in all the wild excitement of battle that filled us!

Beneath us we could see the giant square masses of the thousands of spheres hanging there still, out of range beneath the molten sea that hung above them. We could see restless and panicky movement among them as their third attack was all but annihilated. Far to the right and left beneath us extended their masses.

We gazed downward tensely and saw masses of spheres rushing to right and left *away* from our opening, a movement that for the moment puzzled us. We saw that there was to be no swift succeeding attack, though the creatures beneath knew as well as we that scant minutes remained before the final cataclysm of the spinning world beneath!

We hung tensely there, our sphere so hot that its walls and controls seared our hands. Then suddenly there shot from either side just beneath the molten fires, just out of their zone of intenser heat, a double mass of spheres, driving beneath the opening in which we hung and letting their yellow beams of death drive through the great glare toward us!

"The spheres!" cried Kelsall in that instant. "They've come toward us just beneath the molten roof—!"

As they shot toward us a wild storm of brilliant beams criss-crossed the opening in

which we hung but in that split-second the control-wheels spun beneath my hands and our sphere leaped upward before the deadly rays could reach us!

Then as the masses of spheres drove farther into the opening beneath us, our own sphere's rays stabbed like light among them, leaping in brilliant destruction as they spun.

Two-thirds of them winked into nothingness beneath our leaping rays and in the next instant, as the remaining spheres drove wildly into the opening and swerved from our rays, they were engulfed by the roaring molten walls of living fire about us. But straight up from beneath and from either side still, scores upon scores of spheres were whirling madly toward the opening of the shaft in which we hung!

Over the roaring from all about us came the swift-succeeding detonations of our brilliant rays as they swept in swift, dancing lanes of death through the masses of spheres that strove to break in upon us!

Hanging as we were a little up inside the great shaft's opening, they could not loose their rays up upon us until they had burst up into it from either side or beneath. And as they did so, as their masses appeared beneath us, Darrell sent out terrific beams, lancing down in lightning-like stabs, sweeping through them in swathes of death, mowing them from existence as they appeared.

Clinging to the sphere's controls, I sent it dancing from side to side in the great shaft, venturing almost to its death in swift short rushes toward the flaming seas of death about us, leaping this way and that in the great shaft to escape the rays that the spheres loosed blindly up toward us!

It seemed in that moment impossible that we four in our single sphere could thus hold back the countless thousands beneath. Yet our rays stabbed downward still, sweeping the opening beneath us clean of the gleaming spheres as they rushed into it, while scores of others of those rushing spheres were whirling in that wild moment to dreadful death in the thundering fires around us!

NEXT ISSUE'S NOVEL

THE EXILE OF THE SKIES

By RICHARD VAUGHAN

CHAPTER XIV

Trapped

UP—UP—and then came wild cheers again from Darrell and the rest of us as the uprushing swarms of spheres recoiled from the death we were loosing upon them! They drew back, swiftly massed their foremost globes into another great column like the first ones that had been hurled against us. Then the column was rushing up from their far-flung masses of waiting spheres once more. As it did so we heard another distant dull tremendous roar from far beneath and as we glanced down we saw another great section of matter breaking loose from the spinning and deserted hidden world beneath!

"Hold steady!" Darrell shouted. "The flesh-things know it's the end for all of them if they don't get up the shaft before their world bursts—they're coming again!"

This time when the column came within ray-range of us, one of its foremost spheres veered to one side. As our rays stabbed down and shattered the uprushing column, this single sphere seized the instant to rush blindly up into the glare of light and heat about us, whirling up the shaft past us.

Darrell sent a stab of yellow death up into the shaft but before our rays could reach it the sphere had shot up out of sight above us.

"The hundred spheres at the shaft's top!" yelled Fenton suddenly. "It's gone up to get those hundred spheres—to bring them down upon us from above!"

Beneath us the last of the attacking spheres had drawn down among the waiting masses, hanging there with them for a moment as though waiting. Long minutes we waited. There was a pause, a pause broken by a sudden swift forming of hundreds of countless spheres beneath into another column, a column that came whirling up again toward us!

As it flashed up toward us there came a hoarse cry from Kelsall, gazing upward. Glancing upward I made out, high in the dim glow of the great shaft above us, little flashes of white light—little beams of white light that were growing each instant brighter

—beams of light that came from a solid column of a hundred spheres thundering down the shaft upon us.

It flashed no rays lest they stab past us and destroy the column beneath but it bore down upon us in a solid mass that meant to smash us by its terrific impact! An instant more meant the end.

Then as that narrow column of spheres thundered down the great shaft's center upon us, as the other column from beneath rushed up, I made a decision. I gripped the control wheels in an iron grasp and sent our sphere rushing sidewise from the path of the spheres above, sent it whirling straight toward the molten roaring flood of the great shaft's wall!

In an awful crash of metal upon metal the two columns of spheres, thundering up and down toward each other, were transformed into a single great mass of wreckage that spun in the great shaft's opening beneath us, that then was swirling into the great shaft's molten sides and vanishing in bursts of flame even as our own sphere recoiled to the shaft's center away from the searing molten floods!

Our swift leap sidewise had saved us from the downrushing hundred spheres from above. The next moment, as though spurred at last to mad, utterly heedless action by the spectacle, the thousands of spheres that hung beneath us there moved suddenly up toward us.

The black sphere of their rulers placed itself now at their head. Purposefully, deliberately, they came upward in their last great attack. As we awaited them, as my fingers gripped the control-wheels, a hoarse, wild cry came from Darrell.

"The ray-control!" he cried. "It's useless —the sphere's ray-charges are exhausted!"

THE sphere's ray-charges exhausted! Our only weapon gone! The white faces of Kelsall and Darrell and Fenton stared into my own, whirled in an insane kaleidoscope about me.

Upward toward us, purposefully, grimly, the far-flung sphere masses came, were almost within ray-range beneath us.

"The world beneath—breaking up!"

Breaking up! A colossal thunderous roar of sound drowned in its stupendous roll even the roar of the fires about us! We glimpsed

[Turn page]

oh-oh, Dry Scalp!
"BILL'S A GREAT DATE, but he's a square about his hair. He's got all the signs of Dry Scalp! Dull hair that a rake couldn't comb . . . and loose dandruff, too. He needs 'Vaseline' Hair Tonic!"
Hair looks better... scalp feels better... when you check Dry Scalp
Vaseline HAIR TONIC
NEAT SOLUTION, this 'Vaseline' Hair Tonic! Just a few drops a day check loose dandruff and other annoying signs of Dry Scalp . . . make your hair naturally good-looking. Contains no alcohol or other drying ingredients . . . it's economical, too.
Vaseline HAIR TONIC
TRADE MARK ®
Listen to DR. CHRISTIAN, starring JEAN HERSHOLT, on CBS Wednesday nights.
VASELINE is the registered trade mark of the Cheesebrough Mfg. Co., Cons'd

the spinning, gleaming sphere of the hidden world beneath, that had spun at earth's heart since earth's beginning, expanding, swelling, then breaking into colossal masses of matter, that went whirling outward in all directions toward the molten floods of the earth's encircling shell!

BENEATH us massed thousands of spheres hovered as though stunned, stupefied, by the titanic cataclysm. Then as I saw titanic masses of matter rushing toward us, as they were rushing toward all the encircling molten shell of earth, I gripped the control-wheels and sent our sphere flashing like lightning up the great shaft!

And even as we leaped up we glimpsed the colossal fragments of the burst hidden world striking the massed spheres beneath, annihilating them and driving their wreckage toward the molten encircling shell!

Upward like a darting ray of light our sphere shot, up through the shaft at drunken speed. About us there came a stupendous reeling shock—the shock that marked the death of a world. As I clung to the controls I heard a long grinding roar about us. The shaft's walls seemed to march inward upon our upward-flashing sphere as beneath that terrific shock from within all earth swayed and quaked!

But as the shaft's walls moved slowly toward us, as we flashed crazily up through the roaring darkness between them, I held open the speed-control with the last of my strength. I heard as though from an infinite distance about me the hoarse cries of Darrell and Kelsall and Fenton over the grinding, closing roar about us.

And then abruptly, just as the great earth-mass buckled about us, we shot up into the open air! Above us were the brilliant stars of heaven!

I halted our upflushing sphere and we swayed there, gazing downward. In the long triangular clearing the great opening of the shaft, with a final dull great roar, was vanishing, closing, even as earth quivered about it!

The way to that vast space inside earth, where had spun the hidden world, was closed! Closed forever by the titanic cataclysm in which that hidden world and all its spheres and all its great flesh-creature hordes had gone to death together!

IT WAS not until many minutes later that our sphere came at last to earth's surface. In those minutes we hung there, gazing downward as though stunned toward the great sunken circle of earth which alone remained in the clearing to mark the place of the great shaft.

Then as I sent the sphere downward, as it came to rest, its humming ceased. The door clanged open and we stepped forth, Kelsall and Darrell and Fenton and myself, stumbling out onto the surface of the long clearing to stand there, gazing slowly about us.

Far above us stretched the great curtain of the brilliant tropical stars and in the white light that fell all about us they seemed unchanged. The long triangular clearing, the two swift-flowing rivers on either side, the dark mass of the jungle stretching far away about us, our tent and boat at the clearing's edge—all seemed the same as on the night, two days before, when we had waited for the appearance of the fourth light-shaft.

"Two days!" Darrell's low exclamation beside me echoed my own thoughts. "And what we've been through in them!"

Fenton nodded. "Two days and in them we've penetrated to another world and have seen that world go to death."

"It all *was* real?" I cried. "We *did* go down the shaft—did find you two there in the hidden world?"

"It was real," said Kelsall, slowly, thoughtfully. "The horror that rose toward our world—the destiny that halted that horror at the last. Real—yes."

"And this sphere—real," Darrell said. "And the things that our world can learn from it, gain from it, when it knows at last from what it escaped—"

He was silent and then we all were silent, standing there in the dim starlight at the clearing's center with strange emotions clutching at our hearts. Standing there in a dark little group, behind us the gleaming shape of the great sphere.

Standing there, unspeaking and unmoving, as though unable yet to comprehend, to believe in the miracle which had held back the doom that the creatures of the hidden world had prepared for the world of men. Which had loosed instead upon the hidden world itself and all its creatures a greater swifter doom.

Frenzied things rushed about the streets of cities

THE MOLTEN BULLET

By ANTHONY RUD

To face world's end calmly requires saintly fortitude, or the dedication to vengeance with which Ammerton pursued Beckerl

THIS is the last of my long series of studies of the folk of the Lost Planet, fellow Skrygeours. Or, fellow Martians, as we have agreed to call ourselves, the name being more pleasing to the electric ear.

I feel a warmth and a sympathy for those Earthmen, so far ahead of us in many ways, yet totally unable to help themselves in that last dreadful calamity.

Since we have adopted their spoken and written word, in place of our thousands of clashing dialects different along each two canals, and so many of their incredible mech-

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anisms, it is only natural that we should have devoted time to their individuals.

In passing let me say that my deepest regret has been the inability of myself and other Martian scientists, in spite of our monster selectoscope, which allowed me to pick up their ether waves, their speech, even to follow the movements of any single Earthian with understanding, to get together with their great scientific men in any sort of talk.

We could hear and see and understand almost everything—but we could *not* fathom the manner in which those ether waves they called radio were flung from place to place, even to us out here in the center of the Universe.

They, on the other hand, were apparently several time cycles behind discovering anything similar to the Loamm selectoscope, which would have enabled them really to study *us*!

As I have reiterated, both physically and mentally they resembled us so closely—allowing for the differences in climate and our other natural advantages, of course—that it is almost certain we sprang from the same stock.

Either the Creator developed life on both planets in almost identical fashion—or at some past time and greater epoch of civilization we must have conquered the difficulties of interplanetary travel and sent a spaceship to colonize Earth.

I favor that theory. Though of course it *might* have been a landing party from Earth which started *us*!

I had great hopes for Albert Einstein Ammerton. He was more like a Martian than any of the other scores of Earthmen I had studied. If any man on Earth could ever have invented our selectoscope or its equivalent, Ammerton was that man.

ACCORDING to their time reckoning, which I explained earlier, Ammerton was born in the year nineteen thirty-seven, A. D. Though we might have regarded him notably backward in some respects, from his very earliest years he was far ahead of his fellow Earthians. He was a mathematical genius.

At the age of eleven he graduated from Massachusetts Institute of Technology and was already in a fair way to becoming recognized as the greatest Earthian authority on mathematical variants. When he was fifteen and acting as third assistant at the great Sandraes Observatory, he worked out a correction to the parallax of Neptune—an error which had gone undiscovered for more than a century.

Development of this kind, usual with us on Mars, was phenomenal on Earth. Ammerton was called a prodigy. Like our great astronomer and calculator, Ebii Loamm, who conquered the binomial theorem at the age of forty months, Ammerton was a trifle narrow in after life. He did not become insane, however. You will recall that Loamm, after inventing the selectoscope, went violently mad at the age of two hundred, in the very prime of his young Martian manhood.

Ammerton's greatest interest lay in the far stretches of the Universe. He was human enough to court and marry a beautiful young woman, one Elspeth Sandraes, daughter of the multi-millionaire Earthman who had given this observatory its great three hundred-inch mirror telescope.

So no one was greatly surprised when in nineteen hundred sixty-three, at the death of the observatory chief, Albert E. Ammerton was promoted over the head of the then assistant chief, one Hans Becker, and given supreme authority in the Sandraes Observatory.

Note that name, Hans Becker. He was much like many Martians you and I know—selfish, consumed by inner furies, men who believe that all that they desire should be handed to them irrespective of their real desserts.

With the selectoscope I followed Becker and Ammerton and flattered myself I understood them from bones to brain. It is too bad they were not radio engineers, for if so it is certain we would know now the one great Earthian secret which escaped us.

Even now, after one of our Martian centuries equal to one hundred seventy-eight Earth years—I often puzzle over what those early radio broadcasters were trying to tell us when they kept repeating over and over again that statement about the music going round and round. It did and so did their words, of course, but as far as giving us the hint we sought it seemed irrelevant!

Hans Becker was about forty years of age, haughty and arrogant of manner. He was a competent astronomer of course, painstak-

ing and methodical, until a pair of things happened to upset him greatly.

First, the beautiful heiress, Elspeth Sandraes, married Becker's young rival, Ammerton. Second, Ammerton received the coveted post as head of the observatory. As chief assistant Becker believed that he should have received the appointment. And it is probable that he did love the girl. A good many men of assorted ages did.

How Becker did rage! I was fascinated by him and followed him on the long walks he took over the countryside. He walked fast in spurts, sometimes raising his right leg stiffly in a sort of wooden-soldier march, sometimes stopping short to lift his fists to the uncompromising stars and shout curses which ought to have turned green the face of the moon.

Becker's own white face would grow red, then purple, while his thinning thatch of yellow hair bristled with the electricity generated by his venom.

All that first year Ammerton, happy with his new wife and the great camera-telescope, was unaware of the hatred and jealousy seething in Becker's heart. In fact Ammerton was extremely blind, never finding out about this personal grudge until it was almost too late to do anything about it.

IN ALL their relations at the observatory Becker was courteous, suave and obedient to his new chief, bending often from the waist in the stiff, rather jerky bow which was characteristic of him. But his inner thoughts must have been black and slimy enough. He vowed aloud in a shout to the distant stars—and to my selectoscope —that he would devote the remainder of his life to vengeance.

It was Ammerton's career as Earth's foremost astronomer which Hans Becker ruined —and ruined so insidiously, after a long period of seeming harmony with his chief, that the plotter achieved his object in full before Ammerton so much as suspected he was the victim of a conspiracy.

Becker came of a German family of clockmakers and had himself served an early apprenticeship in that trade. So he was deft with delicate machinery, intricate little affairs of springs, pawls and ratchets. He studied the finer adjustment mechanisms of the awesome camera-telescope, then busied himself for weeks in a secret workshop in the cellar of his home.

One afternoon, when honest astronomers are asleep, Becker brought his devilish little gadget to the observatory and fitted it to the great telescope. It concerned tiny fractions of a degree in setting and was so small itself and placed so well out of the way that no one could suspect its presence, save possibly the subordinate in charge of cleaning, oiling and care of the expensive instrument. And that subordinate was Hans Becker himself!

A tiny electric switch in the adjoining office had to be thrown in order to affect the telescope. When the switch was not in contact, the instrument was perfect as usual. But Becker, by merely moving that switch arm back and forth, could make one observation faulty, while another taken the next minute, was accurate!

The error there on Earth was perhaps three one-hundred-thousandth of an inch. Two and one-half billion miles away on Neptune, for instance—a planet much nearer than any star—that tiny discrepancy had magnified so greatly that an astronomer could break his heart endeavoring to understand it.

Or he could believe that stars and planets suddenly and irresponsibly had left their prescribed orbits, like so many off-center-weighted golf balls in flight, and were slicing and hooking themselves into the heavenly rough.

Becker was far too wise in his plotting to allow anything like this, uncontrolled and incredible, to happen. What did seem to occur was calmly regulated and consistent, even though startling. You see, astronomy was so exact a science that when even a tiny error showed its head it created a sensation throughout the world.

It is as if in a high school geometry class a young sophomore went to the blackboard and demonstrated to the astounded teacher that in a certain right-angle triangle he had discovered, the sum of the squares of the two other sides did *not* equal the square of the hypotenuse!

Becker waited until his chief launched a series of observations. These had to do with the earth's present orbit and inferentially with the eccentricity of that orbit from one million years B.C. until the present day.

Ammerton little suspected that he was go-

ing to find anything more wrong than might be accounted for by the difference in modern and old-time instruments. Croll, Leverrier and Stone, working out these calculations first, had been handicapped by telescopes outdated by more than a century.

But Ammerton's results did begin to come out differently! At first he was inclined to doubt, to think that possibly the great instrument itself must be in error. But tireless checks over all the great coordinates of the heavens, finally convinced him that he was on the right track, and that those old figures, believed in the way lamas believe in Buddha, were in gross error!

BECKER stayed with his chief all night long every night for months, helping take the photos, tabulating results, making intricate calculations.

When not in the observatory, Ammerton was walking around, wide-eyed and preoccupied. His wife scarcely knew him. He muttered long strings of figures to himself. The thing he had come upon was stupendous, unbelievable!

Yet everything checked. Each time he repeated his observations he obtained the same amazing results. Of course it *had* been difficult indeed for those poor fellows with their primitive apparatus back in the nineteenth century. But even so it was hard to conceive that they had been this far wrong.

At last Ammerton's final doubts were satisfied. He sat down to write the epoch-making article for the Journal of Astronomy, which would give these new results to a wondering world.

Heretical statements such as this were the meat of the new exposition, which would make savants gasp:

> It must not be supposed that the eccentricity, in obedience to the law relating to planetary eccentricities, oscilates between the absolute maximum and the absolute minimum, the perihelion shifting continuously forward. On the contrary, the successive maxima and minima are very unequal and are attained after very unequal intervals.

Becker looked startled and shocked when he read. He stammered around and then suggested fearfully that it might be wiser to break the news somewhat more gently. Would not *Herr* Ammerton consider sending out a few hints first and postpone the actual publication of his revolutionary article until some future time?

This got the scientist's back up—as it was intended to do.

"By the cosine of Caraneous, *no!*" cried Ammerton, banging his clenched fist on the table in passionate emphasis. "I'll never quibble or qualify! When I'm right, I'm *right*—and everyone must know and understand!"

"Of course you know best, chief," murmured the hypocritical Becker, bowing stiffly from the hips. "And what a poke in the eye is coming to you, you handsome sap!" he told himself, concealing jubilance under his usual mask of grave suavity.

It was during those days, following the mailing of his treacherously deluded article, that my fullest sympathy went out to poor Ammerton. Not only had he been betrayed in his lifework but all the natural and unnatural misfortunes men are heir to began to gang up on him.

He fell ill with influenza. His wife died in childbirth and the baby with her. And then when at long last Ammerton managed to stagger to his feet, facing disaster as a strong man should, resolved to bury his sorrows in work, he found even that chance for forgetfulness slipping away from him!

The friendly editor of the Journal of Astronomy had sent him a message, hinting that, after having read the cosmic surprise in the long article, he wondered if Ammerton were not poking out his neck a bit too rashly. He suggested a careful recheck of results.

Ammerton, beside himself with grief and illness at the time, answered this with curt savagery, quite unlike his usual manner. So in due course the article appeared. The magazine editor realized it would boom circulation even though it did ruin Ammerton. And then, of course, there was the slight possibility that the man was right. He had a worldwide reputation for care and thoroughness in his work.

The sensation was all that anyone expected. Then for a few weeks—silence. Finally, when other observers had gone over the ground, there came the frigid word that Ammerton must be quite mad. This came from Professor Emmanuel Liebling of Prague.

An Associated Press interview with another noted astronomer, Dr. Wilfred Gra-

ham of Lick Observatory, appeared in many of the chief newspapers. Dr. Graham said flatly that his learned contemporary was mistaken.

Less dignified savants all over the earth jeered loudly. Any eighteen-year-old freshman in college astronomy could take a twenty-foot 'scope and show how ridiculous these findings were!

The Judas plot of Hans Becker had worked to perfection.

NOW he added the master touch. Spurred out of his grief, indignant beyond words, Ammerton plunged into a complete recheck of his work. And his second bath of results was identical with the first to a dozen decimal places!

He called in Becker to see. But now, appallingly, the results were totally different! Becker, of course, had thrown off the switch.

Sweating even in that chill mountain observatory, shaking with a palsy of sudden horror, Ammerton suddenly broke. He yelled insanely, flung his fists aloft and ran from the observatory, gibbering in momentary madness.

If Hans Becker had then and there dismantled his secret apparatus-of-error he would never have been discovered. Like many another criminal, however, he could not resist overdoing it. He saw that his chief's great brain was practically unhinged. One more shock, one more senseless happening which reason could not explain, and the mental ruin of the young scientist would be complete. That, nothing less, was Becker's goal.

Back into the observatory rushed Ammerton. One can realize just how far from his usual mental moorings he had drifted by what he did then. He actually cleaned the lenses of a ponderous eyepiece, usused since the first days of testing the giant camera-telescope, *and looked through this eyepiece into the heavens!*

Becker waited. The opportunity for his final coup would arrive, he thought, but this was not it.

Ammerton was sweeping the night sky, his own mind chaotic. He chanced to cross the orbit of Polyphemus. This gigantic asteroid-comet, which for many centuries had come near—dangerously near—the Solar System once each eighty-three years, was out of sight of any save the very largest telescopes on Earth. It may have been causing the jitters just then to the ice-blooded inhabitants of far-away Uranus, if any.

Ammerton's keen observer's brain, still not addled as were his emotions, caught and fastened to a strange thing. There was something peculiar and disturbing about the asteroid-comet, showing out there against the blue-black of interstellar space as a faint streak of orange fire.

Polyphemus had a kink in its tail!

In plain words, his tail should have been slightly curved if he were pursuing his ordinary course. Instead there was a wide bend in it! That meant trouble.

Ammerton instantly realized the possibilities. They were so monstrous that the thought acted like an ice-pack on his fevered head. The distortion of the tail meant that somehow and sometime the asteroid-comet had abruptly changed course!

As a possible result, it might hit and explode one of the planet members. Or another catastrophe, thought Ammerton with horror, might lose Earth its sun—causing all inhabitants of that planet to freeze to death in a few hours. Or it might even knock Earth straight *into* the sun, to be swallowed up in boiling molten oblivion!

There were other terrible possibilities as we on Mars know—but those were enough for Ammerton at that time. He started new observations, making photos of Polyphemus every half hour, making calculations from them.

During the following day, unable to sleep, the scientist studied all available data on Polyphemus. He made painstaking calculations and at ten that evening carefully swung the giant telescope to a certain position of right ascension.

Careening along through space at its terrific pace, the comet-asteroid should have reached this exact point at ten P.M. sharp, Greenwich Observatory time. Again Ammerton looked through the eyepiece of the telescope before getting ready to take the photograph.

An awed exclamation burst from his throat.

Polyphemus was not there!

This was *not* Becker's fault. That scoundrel was lying low and awaiting a good opportunity, which he did not suspect had ar-

rived. Ammerton had told him nothing of his blood-chilling discovery.

WITH the big telescope sweeping back to the comet-asteroid's position of the previous night, preliminary to some sleuthing of the star spaces, Ammerton was shocked to discover Polyphemus almost exactly where it had been the night before!

Realize what that meant! The tail had grown appreciably shorter. Polyphemus had changed direction sharply and now was headed *directly toward Earth* at an approximate speed of three thousand three hundred miles per minute!

Of course, whatever it was that had shooed it from its normal orbit might have slowed it somewhat or vastly increased this usual speed. Time alone would tell. But Ammerton was never to know, nor anyone else on Earth, why Polyphemus had changed its course. No one could suspect that it was because the asteroid-comet was a mass of highly magnetic iron, attracted to Earth's iron core!

However, unless something intervened or the speed of Earth was sufficient to outstrip Polyphemus, this unholy game of celestial tag was bound to end in blazing catastrophe!

The mass of Polyphemus, which was indeed a super-comet, was approximately seven times greater than that of Earth's moon—about one-twelfth the mass of Earth itself! When and if these two bodies collided it would create such intense heat that both would be utterly consumed and the resultant gases blown away into furthest space!

Naturally there could be no survivors on Earth unless some of them came forward with a spaceship at the last minute and succeeded in navigating it to some other planet. If that happened, of course, the refugees would have been most welcome among us on Mars.

Chances, however, of any group of Earthmen inventing and actually building such a ship in the short space of a few weeks—the time which would intervene before a collision—were naturally very small.

However, after three nights of intensive study Albert Einstein Ammerton announced to the reporters of a large daily newspaper that Polyphemus had gone wild, left its recognized orbit and was running amok to collide with Earth!

The scientist, though knowing now well enough what would be said of him in astronomical circles, thought it his sacred duty to warn the world. He himself had ceased to matter.

The reporters spread themselves and their city editor cooperated. Ammerton's story was rendered with all due solemnity—if you were not capable of reading between the lines. It was a derisive masterpiece. While seeming to kowtow as usual to the sage of Sandraes, it really said in substance, "This Guy Is A Nut And Here Is Proof!"

Other astronomers, boiling with indignation at Ammerton's previous mistake, did not even wait until their smaller telescopes could pick up Polyphemus. They howled. They jeered. They demanded that alienists be called to consider Ammerton's case, that Sandraes himself and the trustees of the observatory get together and discharge the crazy man.

Through it all, for nearly a week, a pale-faced man with set jaw glued his eye to the telescope and watched the crushing doom. He had every calculation made. He knew the day, hour and second when Polyphemus would reach the outer limits of Earth's atmosphere—and the fractional second later which would be the time of actual impact.

Gripped by gravity, the speed of Polyphemus would increase terrifically, toward the last. It would probably reach the awesome velocity of five thousand miles per second! Earth had twenty-nine more days to live, according to Ammerton.

All of a sudden the derisive clacking of onyx upon porphyry, the braying of human asses, the skirl of jeering bagpipes came to an end. A few of the learned doctors tired of their fun and turned to peer through their own little lensed barrels. Might just as well see what might have caused poor Ammerton's delusion.

Then came this brief appalling message out of Europe:

Dr. Luigi Genetti of the Cisalpine Observatory says Ammerton may be right! Polyphemus headed straight for Earth!

In Sydney they saw it—in Moscow—Cape Town—Buenos Aires—Edmonton. In the course of five or six more days they all could make out Polyphemus. Give them another week and they would be able to discern a small glowing sun, all by itself in a blank

portion of the heavens, using only their naked eyes!

By the time that week was out growing crowds were gathering to stay up all night and stare at Polyphemus. There was an undercurrent of mild excitement. Fear? Not a bit! Too many bearded wiseacres clad in nightgowns had climbed to the tops of neighboring hills and there waited for the end of the world. The great Earth public was enjoying a new kind of show but it was not in the least disturbed—not yet.

The days and nights passed. Of course long since the comet-asteroid had completely tucked in his fiery shirttail—or rather, because of the sun's position directly beyond Earth, it was streaming directly behind it and therefore could not be seen from Earth. Dr. Graham of Lick Observatory now calculated that its speed had increased to thirteen thousand seven hundred miles a minute!

IT WAS when he read this frightened report that Hans Becker realized the truth. A few hasty observations of his own convinced him that destruction of the earth, with everything upon it, loomed.

And Becker, like many another treacherous scoundrel and egomaniac, feared hurt and death to himself with an intensity of shuddering horror. It could not be! It *could* not! It—

He had to get a grip on himself, for just then a surging horde of reporters came rushing to him, demanding his views on the all-important question—did Earth have any chance to escape?

Controlling his shivering, Becker poohpoohed the idea of world destruction. Certainly Polyphemus was coming. But after all, what was the usual fate of a meteor—he knew, of course, *this* was no meteor—which rushed into the realm of Earth's atmosphere?

In practically all cases the friction set up caused it to be consumed utterly! In this case it might be that a fragment would succeed in reaching Earth's surface—enough, let us say, to cause a perceptible jar. Or perhaps it would go unnoted, like the big meteor which fell in Arizona a few thousand years ago.

But Hans Becker, try as he did, could not believe his own words of assurance. For untold centuries the comet-asteroid Polyphemus had been a flaming bulk of molten metal and gases, careening through space. Why should it be consumed in the few seconds—or split part of a second—it would take to traverse the atmosphere of the earth?

Answer—it *wouldn't!*

In his palsied fright Becker forgot all about the throw-switch on his desk and its effect upon the big telescope. What a little matter this thing and Ammerton's disgrace seemed now!

Ransacking his desk, gathering items he meant to take with him to a deep cellar or vault somewhere, Becker accidentally upset one of his desk telephones and did not bother to put it back on its cradle.

The speaker-transmitter bumped against the throw-switch and closed the circuit. Becker went in haste, not knowing and not caring.

Ammerton came into the observatory a half hour later and went to the telescope. No longer was it possible to get anything save boiling seething chaos by training the big instrument upon Polyphemus. But the astronomer had some by-product observations and calculations he wished to make. When, however, he attempted to train the telescope he found it cock-eyed!

From that to a discovery of Becker's apparatus and the subordinate's treachery was a short matter. Ammerton traced the wires to the switch on the desk, and found out exactly how the thing had been worked to make him go haywire on those first calculations published before the scorn and derision of the entire scientific world.

So—he had been wrong after all—and it had been his trusted helper who had betrayed him! From that moment Ammerton, deprived of everything he had loved and valued in the world of men and women, forgot the impending cataclysm except insofar as it limited his time.

Before life was ended he meant to find Becker, who had gone from the observatory and even from the secluded hamlet at the foot of the mountain. Becker had taken the train for New York City. Ammerton did the same. He was out to wreak vengeance.

Then the last four days of fiery terror. From dawn to dusk the sky was practically as usual, save for a gathering heat haze. Polyphemus came always in the direction of the night side of the earth as far as North America was concerned.

At night, however—if you could call it night—a full third of the sky was filled by the glowing rushing monster! It gave far more light than ten suns. Perhaps the most horrible part of it was that, employing plain smoked glasses, any inhabitant of the world could watch Polyphemus actually rolling and boiling and *growing in size!*

WITH a loaded pistol in his pocket Ammerton was on the trail of his quarry. Haste was important now and in those days of mounting horror few people paid attention to others. Each man was searching his own soul for hope and most were finding only the rusted tin cans, worn-out auto tires and empty bottles of past excesses.

Ammerton managed, as time grew terribly short, to learn that Becker for some reason had left New York City—it was his fear of the falling skyscrapers—and had gone to a place called Port Washington on the shore of Long Island.

But finding one man in so large a place was a hard task. Ammerton began a systematic search, since it appeared that Becker was unknown to the crowds running panic-stricken about the streets. No one could give any information or cared to try. Most thinking men had provisioned deep cellars, hoping against hope that disintegration of the comet-asteroid would occur, that somehow Earth would survive—with perhaps only a few days of excessive heat.

Becker certainly had sought one of these holes. Ammerton grimly made the rounds, hoping he would be in time.

Mounting terror stretched its icy fingers to clutch the hearts and brains of all careless mankind. Business stopped. Ships put into port and were immediately deserted. Trains, city subways, airplains—everything quit. Power was turned off. Gas plants ceased operation and storage tanks of gasoline, oil and other inflammables were emptied.

Frezied throngs rushed about the streets of cities like ants caught upon a hot plate. The arrogant New York multi-millionaire, Augustus Blick, who manufactured motor cars, was caught, crushed and trampled to death by the maddened mob besieging the largest cathedral in New York, attempting to get inside and repent its collective sins.

In all the world only a few real saints and Ammerton went about uncaring. And Ammerton really did care, not for catastrophe but for completion of the one private affair before it came. Even Polyphemus paled before the star of his destiny. If he found Becker now what did it matter that the end of the world arrived ten minutes or ten seconds later?

That final night almost the entire heaven was filled from horizon to horizon by the glaring molten bulk of the monster of doom. Heat outdoors became too intense for humans. The ground began to smoke. Pitchy trees in the forests suddenly burst into flames. Buildings of frame construction began to scorch and blister. Everywhere men took their families into cellars and holes in the ground, into mines.

Then by word of mouth the dreadful last-minute news was passed—"Two more hours and Polyphemus hits the outer rim of Earth's atmosphere! Then we will know!"

Ammerton, making a final dash across the street of liquefied asphalt paving, realized that when he had searched this block of buildings, in which a bank was situated, he was through. Even with every protection he could not venture outdoors in the remaining moments—if any remained—without shriveling up and burning to a cinder.

"Just let me see him! Just let me see him once!" he repeated over and over in half imprecation, half prayer.

One hour, fifty-nine minutes and fifty-one seconds of the period of grace had sped when Ammerton at last succeeded in bribing his way into the crowded subterranean bank vault. The place was jammed with sweating humanity, lighted only by a few candles and filled with the fearful din of frenzied sinners on their knees. Becker was there. He was on his knees, arms wildly waving.

He saw Ammerton pushing through the crowd, his face a mask of grim vengeance, to level an automatic pistol.

"Don't!" shrieked the Judas.

"You betrayed me and made me the scorn of the world!" said Ammerton, calm and implacable now. "So the world's vengeance—"

His words were lost in the sudden screaming awfulness high above. The heat of the earth's surface, as its atmosphere was consumed like a flimsy curtain, suddenly

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They sank into the mass of glowing cells

Red Shards on Ceres

When young Ronnie Iverness found the bit of shiny rock in a gulch, he led an entire expedition toward ghastly doom!

THAT it was Ronnie Iverness who found the devilish Red Shards was a trick of chance. He was not even a legitimate member of the Farnsworth Expedition to airless Ceres. He was just a freckle-faced twelve-year-old with nerve enough to stow away on their ship, the *Antares*. Dave Iverness, the pilot, happened to be his brother.

Ronnie was dragged out of his hiding place two days after the *Antares* left the Earth. For the balance of the trip and for awhile after the landing on the asteroid he was kicked around by the whole outfit.

Then fortune seemed to smile on the youthful culprit.

"He's a game little imp," Professor Farnsworth said to Dave Iverness when the

By RAYMOND Z. GALLUN

two were alone in the specimen room. "Maybe it would be the right thing to ease up on the hazing and to give him a bit of freedom, eh? So far he hasn't even been out of the ship."

Dave, big and bronzed, chuckled softly. "Sure," he replied. "Ronnie's taken his medicine like a man. He's not a trouble-maker either. He's just so doggone interested in spaceships and other worlds that he can't help himself sometimes!"

Master Iverness was called from the rocket compartment, where Hansen, the engineer, was keeping him needlessly busy polishing metal. Presently, though he was expecting anything but favors, he found himself provided with a regulation spacesuit. When his good fortune was explained to him he was too flabbergasted to say much but his eyes became very large, indeed.

"G-gosh! Thanks!" was just about all he could stammer.

The spacesuit was many times too big for him. The vast bloated legs of the contraption made walking, and even standing, difficult for the boy, for he found it necessary to keep his feet spread wide apart. But Ronnie was quite willing to undergo physical discomfort for the thrills of exploration.

With Farnsworth's full permission he left the ship, along with six men, Dave Iverness among them. The group moved toward the near horizon and presently entered a jagged gorge that looked like the burrow of an angry Titan. Their purpose—in fact the entire purpose of the Farnsworth Expedition —was to collect mineral samples for the Smithsonian Institute.

FOR five hours the kid was in his glory. He and his companions bounded and clambered over the rough mysterious landscape, where shadows were as sharp and black as the fangs of fiends. The massiveness and clumsiness of Ronnie's attire was largely made up for by the fact that the gravity of Tiny Ceres was very slight.

Nothing much happened until the sallying band had almost completed their circuitous return to the *Antares*. Then Ronnie noticed something off to his right. It was a cleft in the rusty ground. The other members of the party were straggled out ahead of him. He hadn't been able to move quite as fast as they in his ill-fitting spacearmor.

The cleft offered no unusual promise. The men had ignored it. Nevertheless youthful whim sent Ronnie hopping to its brink. Thick gloom enveloped its depths. But close to the torn lip of the cleft were curious broken fragments lying in the dust.

They were flat and flaky, like pieces of shattered red glass. As any adult would have done Ronnie stooped and picked one of them up. Inside the thin translucent texture of the shard slumbered a deep bloody glow.

Ronnie wanted to yell out about his find to his brother up ahead. But something unfathomable restrained him. No physical circumstance should have prevented him from doing this, for his oxygen helmet, and the oxygen helmets of all the other spacesuits belonging to the expedition, were equipped with radio receivers and transmitters.

Nevertheless, for some eerie and unknown reason, Ronnie held his tongue. It was as though, somewhere, beyond and yet within himself, a hidden entity was considering the situation cautiously in an effort to determine the best way to cope with it with the least chance of making a mistake.

Master Iverness did not quite realize this at once, however. His own feelings were strange. He stood for a long moment, the red shard clutched in his gloved hand, his brows, his lips, his freckled nose puckered in vague puzzlement. During that moment a subtle web of intangible but very real power ensnared his faculties. Ancient Ceres, barren, burnt out, seemingly lifeless, still harbored magic of which man had no inkling.

Presently Ronnie felt a peculiar tingling sensation in the hand which held the glassy fragment. The sensation warned him that the piece of red mineral was probably not entirely safe to hold onto. But when he decided to drop the thing he was surprised and frightened to discover that his fingers did not respond to his will!

Just then he heard his brother's voice shouting in his earphones, "Hurry up, Ronnie! Where are you anyway?"

The kid really wanted to answer his brother this time. He was badly scared. He wanted to forget everything that had happened, go bounding over the ridge which now hid his companions and the spaceship from view. Words formed in his mind automatically but there they stayed! They couldn't get past his tongue and vocal cords!

It was the same with his sturdy legs. They refused to obey the commands of his brain! It was as though somebody else had suddenly taken possession of his entire body! And Ronnie, with a youngster's quick intuition, knew that the wicked red shard he clutched and couldn't let go of was somehow responsible.

This knowledge did him no good however.

Now he spoke and though the words were undoubtedly copied from his memory in some manner, still he had no wilful part in their utterance. Their tone was cunningly calm.

"Be with you in a minute, Dave," he said into his microphone. "Just wait up for me."

Then, impelled once more by a weird and irresistible impulse which seemed to originate in the substanceless ether surrounding Ceres, he selected more of the shards from the ground about him with his free hand and stuffed them into the pouch that was part of his equipment.

Though he did not realize it he now had fourteen of the mysterious fragments besides the one he held tightly in his right hand. Perhaps this was just a coincidence. Then again, perhaps it was not, for there were fourteen men in the Farnsworth Expedition.

HE PROCEEDED toward the ridge, his movements entirely beyond control. He crossed the ridge and descended into the little valley where the *Antares* rested. With a cunning not his own he scanned the group of men beside the ship.

The entire company—fourteen—was in sight. Those who had not gone afield were busy excavating a shallow pit in the hard crust of Ceres, their purpose to obtain samples of the minerals beneath the surface.

Ronnie's actions, now that he had an audience, were deceptively normal.

"Hey!" he shouted. "Everybody! I found something!"

The men turned to look at him as he bounded clumsily into their midst.

"What's the matter?" Dave Iverness questioned.

"I've got some red stuff like pieces of glass!" Ronnie's voice piped. "I found 'em over the ridge. Look!"

He held up the fragment which his right hand clutched in a viselike grip.

Dave Iverness scrutinized his kid brother closely. He saw that the youngster's face was pale behind the glass front of his oxygen helmet. But this might only be the natural result of excitement.

"Let's have a look at the thing," Dave Iverness invited, extending his hand.

"No!" Ronnie's guiding entity replied. "This one's mine! But I've got a lot of other pieces in my pouch. One for everybody. Wait!"

It was a bad moment for Ronnie Iverness. He alone had an idea of what was about to happen. But in spite of tremendous inner struggle he could not give so much as a tiny squeak of warning. His will was impotent, imprisoned in a body not his own.

As though he were watching the actions of another person he saw himself remove the baleful shards from his pouch and pass them around, one to each of his companions, Dave and Professor Farnsworth among them.

What followed was a strange as the dark wisdom that produced it. A subtle spell of unearthly wizardy conquered the men as easily as it had conquered the boy. By the time each individual knew that all was not well it was too late. Fingers clutched the shards in grips that no human will could break. The channels between brain and muscle were seemingly severed and something invisible and intangible assumed complete control.

Nevertheless the activity of each human brain went on unhampered. Thoughts of fear and dread and wonder were not checked. These men were scientists. This being so, each of them tried to construct a theory which might explain the weird miracle. All of them must have arrived at approximately the same conclusions.

The shards were composed of a material which acted as receiver for some eerie neuronic control, perhaps propogated through space by a form of etheric impulse. These impulses, when received, acted upon nerve tissue, probably first contacting the nerves of the fingers that held the shards, traveling hence to the spinal cords and brains of each individual. The strength of the impulses was sufficient to dominate completely the normal neuronic messages by which a man guides the movements of his body.

Clearly, what had happened was the work of an intelligent agent with a definite purpose. The red fragements must have been

planted beside the cleft in the hope that they would trap unsuspecting spacewanderers.

Professor Farnsworth was the first human marionette to respond to the silent commands of the hidden unknown. While the others waited stiffly he entered the *Antares* and proceeded to the radio room. There he sent out a call to Earth in code:

MARVELOUS DISCOVERY ON CERES. ORGANIZE LARGE EXPEDITION AND DISPATCH TO CERES AT ONCE.
ARNOLD FARNSWORTH.

He learned then that not only his body but his memory as well was a slave to the unknown. The glassy red fragment he held was not merely a receiver of commands. It could be used to probe his mentality as well. Else the message in English could never have been composed.

He could guess too the sinister purpose of the radiogram. More human beings were wanted here on Ceres. As slaves? As food? Only time would tell.

UNABLE to resist the guiding compulsion that gripped him, he left the *Antares* and joined his company. Then the trek toward some cryptic destination began. In single file the fifteen members of the expedition marched back over the ridge. No one spoke. No one *could* speak. Minds still could function but they were as impotent as if sealed in blocks of metal.

The party reached the cleft Ronnie had discovered. They clambered down into its gloomy shadows. There was a rough-cut tunnel there, leading steeply down toward the bowels of Ceres. They began their descent.

In a manner of minutes complete darkness enveloped them. Presently this was relieved a little by light emitted by luminous lumps of radioactive ore in the walls of the passage.

For weary hours the descent continued. Slight though the gravity of the asteroid was, still the task of clambering down a passage, in many places almost vertical, made serious inroads on the energies of the adventurers. Professor Farnsworth felt the effect most, for he was old. Yet he could not stop to rest. The insidious power that had mastered him forced him on as no lash could ever have done.

At last a huge metal door was reached. Ponderously it opened to admit the men. They entered a narrow chamber which must have had the function of an airlock, for in its opposite wall there was a second door, similar to the first, which had now closed.

The second portal swung inward. Brilliant light, like that of the sun, stabbed from behind it. Automatically the members of the Farnsworth Expedition entered the tremendous cavern beyond it.

Far up toward its roof an incandescent sphere shone brilliantly, giving abundant artificial light to this strange place. The floor of the cavern was covered with odd luxuriant vegetation, planted in orderly plots. This was farmland, buried within the heart of dead Ceres.

And now the men saw what manner of creatures inhabited this artificial world. From out of the shadows of spidery fruit, came a group of furry spheroidal monsters with thick legs and delicate tentacular arms. Their mouths were toothless orifices in their globular bodies. Their eyes, set close to their mouths, were cruel and keen. That intelligence looked out through those orbs could not be questioned.

Each creature wore a harness decorated with fragments of the red substance which had been the undoing of the Earthmen. Odd pistol-like weapons dangled in holsters fastened to those harnesses.

The Cereans allowed the Earthmen to advance along the road which led across the cavern floor. They then fell in behind them like a military escort.

Finally the huge cave was crossed. A short tunnel was traversed. Now the humans found themselves in a second cavern, smaller than the first. The air throbbed with the smooth vibration of colossal gleaming engines. Molten metal hissed and cascaded from vast retorts.

Cereans were everywhere, engaged in intricate work which only a high order of intelligence could have directed. Each of them wore a harness richly decorated with the mysterious Red Shards.

They glanced briefly at the Earthmen. Their curiosity seemed small. But in their cold lidless eyes there was a promise of death or worse.

Ronnie and Dave Iverness walked behind

Professor Farnsworth, who was close to the head of the column. Like the rest of the group they could not converse, could not even turn their eyes to look at each other. Their muscles could only obey the guiding force that held them prisoner.

But their minds worked unhampered. Dave Iverness was still trying to devise some plan for escape, though he could see how hopeless their position was. Even if the spell which had enslaved them could be broken there were still the Cereans.

RONNIE was scared. What had happened was his fault. If he had not found the shards all would have been well. But this feeling of responsibility must have sharpened his wits. The kid was made of that kind of stuff.

Professor Farnsworth felt weak and faint after the exertion of the long descent. Specks of color flitted before his eyes. But the scientist in him persisted in trying to understand the inexplicable. He was still observing keenly everything that passed within his line of vision.

The party traversed the cave of machines and entered a third cavern, smaller than the others but still of gigantic size. It was thronged with hundreds of Cereans, facing its center in ranks arranged like the spokes of a wheel. There was no artificial light here—only a sullen reddish glow, originating from something in an open space at the center of the packed ranks of monsters.

Slowly down an open lane the Terrestrials were forced to approach the thing. Then they saw what it was—some hellish form of life. It grew in a bowl-like hollow in the floor. It seemed at first glance to be only a semi-liquid mass of phosphorescent pulp.

But then they saw the countless fine, nervelike filaments that traversed it in every direction, the glowing nuclei of the myriad oversized cells that composed it. The effect of a close scrutiny was disturbing. Presently and inevitably one realized that here in this mass of alien protoplasm resided deific wisdom, intellect that never wearied.

The ghoulish pulp heaved and moved suggestively, thrusting up hungry pseudopods. From the latter translucent reddish flakes broke away and dropped to the floor around the pit. These were the Red Shards. They were a natural product of the devilish thing, perhaps originally exuded as a liquid from its substance, just as a mollusc exudes the liquid which hardens to form its shell.

A number of Cereans were around the pit. Some were gathering the shards in metal baskets. Others, stripped of all their ornaments except a sort of belt made of interlocking shard fragments, stood in line, waiting to perform what seemed a fanatical act of devotion to their hideous god.

One by one they were easing themselves gently into the pit, whose glowing pulpy contents folded over them and began to absorb their still-living flesh.

The Earthmen could begin to guess their own fate. With cool deliberation their hands went to work removing their space-armor, clothing and other equipment. The air around them now was cool and fresh. They too were to be food for the monster—a strange delicacy which it longed to taste!

A man named Rogers was the first victim. Still retaining his grip on the red glassy fragment that Ronnie Iverness had given him, he lowered himself into the pit with the same outward calm that the Cereans were showing.

He moved very slowly as if to avoid injuring the abhorrent mass of jelly that craved his flesh. Pseudopods enveloped him and he sank into the mass of glowing cells. His body writhed a little, and then was still. Its substance began to dwindle.

Hansen, the engineer, was next. . .

Behind him, just ahead of Ronnie, was Professor Farnsworth. The sickening experience of watching the ends of two of his loyal henchmen had done almost as much to reduce the stamina of his old body as had the exertion of the descent into this realm of horror.

He knew that he was going to swoon before his limbs could carry him into the slimy clutches of the monster. And at last he thought he understood the strange and ghastly mystery of Ceres.

He took one more step toward the pit. Then his knees buckled. He could no longer respond to the commands of whatever it was that controlled him. Blackness closed in around him. His ears were roaring. As he fell, he stumbled against the small figure of Ronnie Iverness, close behind him. The wierd crystal of evil was knocked from his

numbed hand. The boy and the savant sprawled together.

For a fleeting fragment, while a dim shred of consciousness still remained to him, Professor Farnsworth was once more his own master. He acted quickly and surely. With stiff fingers he groped for Ronnie's right hand and struck it a fierce blow. A second shard of evil went skittering and tinkling across the floor.

Then with a final, tremendous effort the old scientist rasped out instructions. "Throw something at that—devil. Something heavy. Kill it! Get the—the fragment away from Dave!"

THE SAVANT lasped into unconsciousness. But a quick young body was free now to act under the direction of a quick young mind. Ronnie no longer held the glassy fragment and temporarily at least his slavery was at an end. Cereans were rushing toward him but for the moment he was free.

His gaze fell on a discarded space-suit. Here at the heart of Ceres its weight was small but its large mass remained unchanged. He seized it, hoisted it easily above his head, threw it with all his might.

It landed in the center of the slimy mass that filled the pit. The effect was something like that of hurling a heavy stone into soft mud. The hard metal of the armor was not like the soft living flesh of the victims and it was hurled with considerable force. The monstrous thing in the pit heaved and throbbed with the shock of pain.

Then Ronnie darted toward his brother. No one hindered him. The Cereans who were leaping in his direction stopped in their tracks. The other natives stood like grotesque statues, seemingly too surprised to act. But it was not surprise that held them spellbound. It was something far more bizarre.

Ronnie kicked the shard from his brother's hand. At once Dave went into action. A second space suit went crashing into the pulpy mass of glowing jelly. The elder Iverness was a powerful man.

This time the effect on the Cereans was more definite. Their hideous furry bodies swayed. Many of them crumpled to the floor and writhed and kicked aimlessly there.

There were no weapons among the Earthmen but Dave rushed to one of the fallen natives and jerked from its harness the pistol-like device with which it was armed. Sensing that the ghoulish horror would quickly recover from the shock of the missiles, he directed the muzzle of the weapon toward the pit, pressed the button which was evidently the trigger.

A sheet of killing flame leaped forth. Dave did not release pressure on the trigger until all of the slimy thing was blasted and seared into nothingness. A reeking steamy vapor filled the cavern.

Panting, Dave looked about. A little light was afforded by the now incandescent stone at the bottom of the pit. The Cereans all lay inert except for feeble twitchings.

The Earthmen regained control of their bodies, discarding the Red Shards.

"That, somehow, seems to be that," Iverness commented with a puzzled grimace. "Good work, Ronnie!"

Several minutes later, under the ministrations of his henchmen, Professor Farnsworth regained his senses. He looked about and smiled in wan satisfaction.

"I think none of our alien friends are in a position to cause us any more trouble," he said.

"How so?" someone asked.

"You all saw that each of them is wearing fragments of the red, glassy substance," the savant replied. "Even those about to sacrifice themselves retained a string of the pieces. This gave me a clue. Those fragments afforded a means of contact between the ruling entity of Ceres and its subjects. They were the detectors for its commands, which were emanated from its substance in the form of etheric impulse or wave.

"Symbiosis—that was what it was—a state in which two diverse forms of life exist together, usually to each other's mutual benefit. The relationship of the ants and the aphids, or plant lice of Earth, is an example. The ants care for the aphids much as human beings care for and protect domestic animals. In return the aphids exude a sweet juice which the ants like. Thus both kinds of insect are benefited.

"The thing in the pit was not just a huge, senseless mass of jelly, of which the Cereans made a god. It was the brains of the whole system! The more manlike creatures were controlled by it just as it controlled us—

through the agency of the red flakes which it produced.

"Without the master's guidance they are inert, as you see. They have not enough intellect of their own to remain on their feet. The ruling entity saw through their eyes and worked with their tentacles, inventing and building machines. Now that the entity is dead they will starve, for they have not the sense to feed themselves.

"Barring violence, the master of Ceres was probably immortal. For, in spite of its wisdom, it had no complex organs to wear out. A few cells in its structure would die, but they could be replaced by the splitting of other cells.

"The entity was very old and probably had seen much in his time. It and the lesser Cereans must have evolved on another greater planet, where their symbolic relationship began, for Ceres is too small to have produced a native life of its own.

"Its gravity is too slight to retain external atmosphere and water. Perhaps that greater planet was destroyed by an explosion. Perhaps thus the asteroids were formed. If this is true the entity's science was already far advanced. He built this comfortable underworld. That, I think, is about as far as human guesswork can go."

There was a moment of silence after the Professor finished. Ronnie broke it.

"The Cereans in the other caverns—they won't bother us either?"

"I'm sure they won't, lad," Farnsworth replied.

"Two space-suits are gone," the boy persisted pessimistically. "Burned up in the monster's hole!"

"We won't need those suits," the scientist reminded him. "There are still enough to go around. Rogers and Hansen are dead, remember. We'll be able to blast and climb our way out of here, I think."

"Then everything's okay?" Ronnie questioned, casting a scared glance about the shadowy cavern. "I mean—about what I did—finding that red stuff."

"Forget it, Ronnie," the savant said. "If I had found the shards I would have done just as you did. Someone would have found them eventually, I'm sure. We are making a fairly complete survey of the substances that compose Ceres. The result would have been the same, no matter who the discoverer happened to be."

Dave Iverness patted his young brother's shoulder.

"You're a real spaceman, kid!" he reassured him.

And Ronnie Iverness' freckled face registered a grin of relief.

THE MOLTEN BULLET

(Concluded from page 63)

mounted to millions of degrees! The bank building, like all other excrescences on Earth's surface, suddenly became molten over their heads. The surface too—even before the actual impact—

But just as he himself dissolved into a wisp of smoke and nothingness, Ammerton squeezed the trigger of his pistol. Flame spurted, meeting hotter flame in mid-air.

The bullet never reached its mark for the mark had gone. The vault, along with the planet Earth, melted, became gas, exploded—all in a trice. The cupro-nickel slug from the gun melted in flight and disappeared.

But Ammerton, dissolving into fire hotter even than the imagined hell of his forefathers, believed in dying that he had avenged the wrong.

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NEXT ISSUE

THE LAST PLANET

A Novelet of the Future by R. F. STARZL

Plus Many Other Outstanding Stories!

the Star Slaver

By CARTER SPRAGUE

"Altemus," the girl spoke softly, "everything's ready then?"

When girls disappear in alarming numbers, Haggerty looks to a planet fifteen light-years distant! A new story

HAGGERTY spotted the odd bracelet before he recognized Ludovic Altemus—or rather the man who called himself Altemus—who was wearing it. At the time he had not slightest idea that the man was named Altemus at all.

But the bracelet was unmistakable. Haggerty had heard its description from two frantic mothers, had read of its odd design in more than a score of reports in the file at Centre Street. None of them was accurate in itself. None of the bereaved parents, guardians or other relatives who had seen it, had had

occasion to note its details until it was too late.

Some of the descriptions had been at fantastic variance. Mrs. Orshansky, plump, fortyish and quite distraught, had called it "a big star sapphire with rays that moved and couldn't be real because my Tanya a good girl." Mrs. Willis, black of skin, emaciated and shadowed with grief, had described it as "a high-toned wristwatch with four hands."

But, faced with the bracelet, less than six feet away, Haggerty knew it at once. It was, oddly, like all of the various descriptions as well as a composite of them all. Haggerty's memory was photographic—a great aid to a New York City detective. While his preconceived idea of the bracelet was necessarily a bit vague, sight of it brought fuzzy outlines into sharp focus.

Behind him was the unceasing uproar of the roller skating velodrome. It had been giving him a headache. Now it faded from consciousness. The hopelessness, which had been rising steadily within him as he fruitlessly pursued the pitiful brief and ever-fading trails of the girls who were disappearing in such alarming numbers, left him as sharply as if it were cut off by a psychic knife.

On the instant Mike Haggerty ceased being a failure and became once more a cop.

He didn't look especially like a plain-clothes man—it was one of the assets, along with his unusual record and his ability to inspire trust in young folk that had led to his rapid advancement in the world's largest police force.

Detective Haggerty was big—thick of thigh and chest and shoulder and an inch and a half over six feet tall. He was dark of hair and his face wore a healthy tan. He might have been a professional football player—which he had been not many years before. His features might have been those of an actor—which he had also tried, without signal success, while at college.

THERE was a trace of the military in the set of his shoulders and the stiffness of his spine—and, while he had not served in Army or Air Force, Haggerty had won more than his share of bits of beribboned bronze and silver directing a carrier's anti-aircraft batteries against kamikaze planes off Leyte and Okinawa.

Haggerty was an athlete, a sailor, a bit of an actor and very much, in his quiet determined way, a cop. His prowess afield had lifted him out of Hell's Kitchen via an athletic scholarship and he had grasped quickly an opportunity to get onto the Force when it turned up after the war. He liked kids and wanted to help them. With a little luck he had found his spot—handling juvenile delinquents—and had become a detective, second grade.

But his luck had run out of late. There were always a certain number of girls in their teens disappearing from Manhattan—probably there always would be. But in most cases the causes were all too evident—delinquent parents, smashed homes, poverty.

Three months before the change had become noticeable. The same kinds of girls were still disappearing from the same kinds of homes—but with them were vanishing girls who seemed to have no business vanishing at all. They were healthy girls, well adjusted girls with normal backgrounds who were uniformly bright in school.

They were handsome girls, spirited girls, girls with friends of both sexes. They stemmed for the most part from that vague and respectable stratum known as the lower middle class. None of them had "steady" boy friends, it was true. But there similarities ended save for the bracelets most of them had been seen wearing shortly before their evanescence.

Among them were girls of all racial descents, of all colors—among them two Chinese damsels. And, one by one, they simply disappeared, leaving no trace whatever behind them.

Haggerty's chief had been frantic. "It doesn't make sense," he had told Haggerty and the rest of the department less than a week before, "but

we've got to make sense of it. The disappearances have been increasing steadily. Look."

He unrolled a large graph on the wall. On the graph were two lines, one red, one blue. The six months past and six ahead were lettered atop their vertical sections. The blue line, with a few minor dips and peaks, was straight across the graph to where it reached the present.

"Those are what we call accountable cases" the chief said. He tapped the red line, which rose alarmingly from almost zero to two-thirds of the way up the graph. "These—well, these are what we're up against. And this, as nearly as we can reconstruct it, is our only clue."

He let the graph snap up on its roller, pulled down another chart on which was diagrammed a visualization of the bracelet.

"Needless to say, if any of you sees a girl wearing anything that looks like this, report it at once. I don't care if you have to break in somewhere to get at a phone. Report it."

NOW, studying the bracelet in three-dimensional actuality, Haggerty noted the inaccuracies in the chief's drawing. It was a much slimmer oval—almost like the silver plates used on wartime identification tags—with the starred circle in its center. It was of some gleaming white metal, platinum perhaps, and the raised transparency of its center, beneath which the four gleaming hands moved at varying speeds, did look both like a watch and a star sapphire. The band looked like solid metal, flexible as silk.

Slowly Haggerty lifted his eyes to the man's face. He took in the expensive looking French cuffs of his shirt with their octagonal platinum links, the obviously well-tailored dark fabric of his suit, the soft opulence of his tie, held in place by a platinum ring, the—alarm bells rang somewhere within Haggerty.

He knew that face—he knew that man. His photographic memory flicked through a brief series of pictures. The bracelet wearer was in full profile, delicate, intelligent and sensitive of feature. Subconsciously Haggerty noted that, despite the near-foppishness of his clothing, he had good depth of chest and slope of shoulder, even as he, like Haggerty, lounged over a soda at the milk bar.

He had seen this man four times in the course of his until-then fruitless searches for the vanished girls or their kidnapers. Once he had been looking on with apparent faint amusement from the sidelines of a dance on the Mall in Central Park. On another occasion Haggerty had seen him, wearing a terry-cloth robe, at the edge of the swimming pool at Jones Beach.

The third occasion—it eluded Haggerty for a moment, then he had it—had been harmless enough. His man had simply been studying the display in a Fifth Avenue store window. Haggerty had seen him but given him no special heed—for he was so obviously not the sort of person he was seeking—and he was always alone.

But here at the velodrome—it was the sort of place where young girls went alone or in groups in search of exercise, play, perhaps romance. And the dance on the Mall. And the bracelet. Haggerty's eyes narrowed slightly as he gauged his quarry.

The girl came up then, graceful despite the fact that she was walking with roller skates on. She was a clear-eyed, fresh-looking brown-haired blonde, trim as a ballerina in her tight blue velvet skating dress with fitted bodice and brief flared skirt.

He was conscious of the roar of sound around him once more as he tried to listen in on the conversation. They talked quietly, in low tones, and he could overhear only fragments.

She said, "—Altemus—everything's ready then?" She looked up at him anxiously—he was at least as tall as Haggerty if less heavily built—and as she talked she fingered a chain around her neck which dropped out of sight beneath her neckline.

He said, "—and you still want to go? You can . . . if you want."

A wave of noise wiped out their speech and before it faded the girl flashed the bracelet wearer a quick tremulous smile, spun in a whirl of her short skirt and headed back for the rink.

Haggerty tried to think it out. He should, he supposed, go to a phone and call Headquarters. But if he did either or both the man and the girl might get away. For the moment, he did nothing. Technically he was within his rights, for the chief had said to report only women or girls wearing the talisman or whatever it was. And while the detective was willing to lay odds that it was just such a talisman that hung invisible from the chain around the girl's neck he had no proof.

So he sat there, covertly studying the man—was his name Altemus?—and trying to figure out a course of action.

The whole business was off-beam. The man with the bracelet, the girl, her appearance, her manner, her attitude toward him—none of these factors added up to the preconceived picture. Hang it, he thought, the girl was nice, but so were the others. And Altemus, if that were his name, suggested neither in appearance nor manner the sort of person who made a living leading girls astray. But then, Haggerty remembered, he himself didn't look much like most people's preconceived idea of a detective.

DETECTIVE HAGGERTY glanced over his shoulder at the rink, caught a glimpse of the girl, skating gravely and gracefully, arm in arm with another girl. She vanished in the crowd at the other end of the rink and he glanced back at the man with the bracelet, was just in time to see him collecting his check and moving away toward the cashier. Haggerty hastily called for his own.

When he got outside the stars were bright despite the spotty glare of the street lamps, and the roar of the velodrome was muffled by the building walls—and his quarry was walking with long easy unhurried strides ahead of him. Haggerty followed.

The man headed west—they were in Brooklyn, which was, when Haggerty thought of it, an odd place for his quarry to be. He proceeded as if he knew exactly where he was going. Haggerty thought, "He's got a car parked here somewhere. There's no bus lines or subways in *that* direction." He began hurriedly to look about for a cab, considered stopping a car if necessary. But neither cab nor car was at the moment in evidence.

Suddenly the man turned a corner and disappeared. Haggerty speeded his pace in pursuit. He reached the corner and stopped, staring into an unlighted expanse of street that ended less than fifty yards away in what looked like a rubbish-littered open lot.

There was no sign whatever of the man with the bracelet.

Without conscious volition, the detective's right hand stole up to the hilt of the revolver nested behind his breast pocket. He felt the hair on the back of his neck stiffen. There was no place where the man could have hidden himself so swiftly—no cover, no other alleyway down which he might have darted. Everything was either blank wall or open space. Yet the man was gone.

Suddenly Haggerty received a curious impression that he was being watched. Hearing no sound, he looked around him quickly, his fingers tightening upon his gun. For the first time since a Japanese suicide pilot had dived directly at his station aboard ship, he felt fear—and this time the fear of the unknown.

Something—a faint whisper of clothing, of breath, he could not be sure what—caused him suddenly to look up. He had an impression of the Big Dipper above him. Involuntarily he opened his mouth to shout, but before he could utter a sound the dark shapelessness had moved swiftly away, darting across the sky in the direction of Manhattan. Within seconds it was no longer visible.

Haggerty leaned against the nearest wall for a long moment. His knees were water, and a mixmaster churned just

under his diaphragm. He exhaled with a *whoosh*, pulled out a handkerchief and mopped his sweating brow. The sweat was cold.

"Talk about your flying discs!" he muttered, seeking some reassurance in the sound of his own voice. Appalled, he wondered how on earth he could report this without winding up in a psychiatric ward in Bellevue. He knew, of course, that he couldn't.

Then bewilderment and fear faded before cold and angry determination. His heavily intelligent face fell into a mold of hardness and he walked rapidly back toward the velodrome. The man with the bracelet had got away—how he did not know. But there was still the girl who had talked with him, there was still the chain she wore about her neck and whatever it supported in the concealment of her youthful bosom.

For ten minutes he stood at the edge of the rink, seeking her. He saw other flashes of blue velvet, each time with a start, but they belonged to taller girls or fatter girls or girls with hair that was red, golden or black, never medium brown. Finally he went back to the milk bar and flashed his badge to the barman.

"Remember the tall chap that just left?" he said, nodding at the spot where his quarry had been standing.

"Sure," said the barman, expertly mixing a double soda. "A very slick article. What's he done?"

"Nothing yet," lied Haggerty. "How about the kid—the girl in blue velvet—who talked to him just before he left. Know her?"

"I know a million of 'em," said the barman, a round-faced lad as Irish as Haggerty. "They come around like locusts. Sure I know her. She's a nice kid." This was said combatively.

BUT the detective slowly shook his head. "I'm not going to arrest her," said Haggerty patiently. "I'm worried about her, that's all. A lot of nice kids have been disappearing lately. Do you know her name or where she lives?"

"Nope," said the barman, growing interested and letting his work be halted. "Say, you mean that big wheel? He didn't look the type. A slicker, yes, but in the right way."

"Forget types," said Haggerty, losing patience. "I want to know where to get hold of that girl before something happens to her. And if you don't tell me, I'll fix you!"

"Hey, take it easy, guy," said the barman. "I was only trying to think. Flo's a pal of hers. Flo is the girl sitting down over there by the wall, the one in green with the skinny guy."

"Thanks," said Haggerty. He walked over to where Flo was sitting. It took some doing but he finally managed to convince Flo that he was what he said he was and did not intend to put her girl friend behind bars. Her name, he learned at last, was Laura Campbell and she lived some fifteen blocks away. Haggerty thanked Flo, went outside and managed to find a cab.

The girl's mother, a tall faded handsome woman in a blue wrapper finally answered his ring at the doorbell. She let him in, looking a little bewildered at having a detective call upon her family at midnight. Mr. Campbell, a lanky and sandy-haired Scotsman with a faint burr, came downstairs as Haggerty was explaining.

"I'd like to talk to your daughter," he said, adding hastily as Mr. Campbell began to swell, "She's done nothing wrong. It's these disappearances. I picked up a tip that she's in danger."

"But she's asleep," said Mr. Campbell. "She came in half an hour ago from roller skating. She said good night to us."

"Douglas," said Mrs. Campbell, "you don't suppose—you remember, I did say she hadn't been herself lately."

"Nonsense!" protested her husband "She's just young—and a girl." He turned to Haggerty. "I think we'd better have her down."

"If you will," said the detective, feeling a load removed from his soul. But it was back less than a minute later when Mr. Campbell came down the stairs again, this time with dragging feet and

staring incredulously at a note in his hand.

"She's gone," he said. "She must have slipped out. Here." He handed the letter to his wife, who read it, reread it, then handed it without a word to the detective. It was very simple, very final. The note read as follows:

Dear Dad and Mother,

You mustn't worry about me. Yes, I've gone for good. I hate to do this to you but it's the only way. All I can tell you is that there is nothing wrong about it. I'm going to be very happy and do a lot more good than I could do here. Please forgive me for leaving you like this but I've thought it over and *thought* it over and I know I'm doing the only right and possible thing. Tell Flo she can have my dresses and the fur coat you gave me for Christmas. I shan't be needing them where I'm going. And say good-by to the gang for me and above all please forgive me and don't worry. I love you both very *much*—Laura.

That was it. The formalities took a good three hours and it was already daylight when Haggerty got back to his modest one-and-a-half-room apartment in Stuyvesant Town. He looked sallow and older than his years in the brightness of dawn. In his mind's eye he was still visualizing Laura Campbell as he had seen her talking to the stranger in the velodrome. He could see all too clearly the grief etched on the kindly faces of her parents, bereft of their only child.

He stood inside his apartment door and all at once the hairs on the back of his neck were again stiffening. Something was wrong. His photographic memory went to work, studying every article in the apartment, seeking the source of his sense that something was not right. The floor, the rugs, the studio couch, the cushions, the chest of drawers, the lamps, the books, the pictures—

THE kitchen door! He had it now. He had left the kitchen door wide open to air out the apartment without risking having his living room drapes rain wet. Now it was all but shut. Someone had been in his apartment during his long absence. He supposed it could have been the superintendent, perhaps the exterminator. But he did not think so. He edged toward the kitchen carefully.

He couldn't see much inside. He studied it, got down on his hands and knees, found no traces of wiring. Then he peeked through the crack at its hinge edge. He could just see the stove. There was something sitting atop the range cover, something that looked like a small old-fashioned automobile horn, only of white metal and small and flatter and—deadlier. It was aimed directly at the place someone would normally walk through in entering.

Haggerty picked up a chair, stood well back and pushed the door wide with its legs. When it was half open there was a sudden blinding flash of white light and, protected by the wall as he was, Haggerty felt a searing blast of unbearable heat.

There was no sound at all, but when it was gone, as it was in an instant, a great brown scorched stain covered half of the wall facing him. It seemed to be burned right into the plaster. The edge of the kitchen door was charred for a yard of its length.

"Mackerel!" he muttered and again felt watery inside. He peered through the partly open door. Where the booby trap had stood atop the range cover was no more than a little heap of ash.

Carefully for he did not wish to escape one booby trap only to fall prey to another, Haggerty entered his kitchen and studied the ashes, which were more of a dust or powder upon close inspection. Whatever it was, he told himself, it had been powerful. He wondered how much it was going to cost him to get his place fixed up again. He began to get angry.

On impulse he picked up the telephone directory. If he could locate an Altemus—the right Altemus—he might be able to follow through a bit more on his own and come up with something credible to report. He still didn't want to look like an idiot.

There were only three Altemuses in the book. One was listed as an insurance broker, another was a Mrs. The third read—LUDOVIC ALTEMUS, EXP. 777

E. 93. There was also a telephone number but Haggerty didn't want to call Altemus up. He wanted to see him—badly.

Riding uptown in a cab, Haggerty tried to add up his discoveries. He looked at the problem in its entirety, or tried to. Altemus, of course, was part of a vast criminal organization, dedicated to the theft of attractive young girls. It had for some weeks been known that New York was not the only locality plagued by the disappearances. Though no police force was desirous of making public its disabilities, the kidnapings, if they were kidnapings, were being conducted upon a world-wide scale.

Capetown, Lyon, Vienna, Buenos Aires, Leningrad—yes, rumors of similar troubles had even been wafted from Russia. You could not, Haggerty thought, even call the gang white slavers. For they seemed to know no color line, even here in New York. The only evidence had been the vanishings themselves, the bracelet talismans, heart-rending notes like that Laura Campbell had written.

Haggerty knew he should have reported the night's events in full, even though he became a laughing stock by so doing. But he had been deterred by a nagging hunch that, if he brought the whole force down on Altemus—if indeed Altemus were his man—that somewhat foppish character would simply disappear.

He even had the colossal nerve to call himself an "exporter."

Ludovic Altemus lived in a house—one of those pseudo-Norman, white-stone chateaux which, despite the depredations of small cinemas, low-built shopping blocks and Swedish modern apartment houses, still are sprinkled liberally about the upper East Side. Its front doors were of unbreakable glass, supported by an ornate and heavy iron grille.

Altemus himself answered the bell. He looked shaved, rested and entirely at ease in a maroon satin-and-velvet smoking jacket.

THE man's appearance of well-being did nothing to lessen the anger of the detective, who needed a shave and a change of linen and whose nerves felt nubble-ended from fatigue.

"Come in, Mr. Haggerty," said his host, stepping aside to admit him. "I'm delighted to see you."

"That I don't believe," said Haggerty, entering a lofty and ornate hall from whose rear rose a circular staircase.

"Join me in some coffee," said Altemus, whose speaking voice was deep and cultured and bore only the faintest trace of some unidentifiable accent. "If you haven't yet been home, I must warn you. If you have, I must congratulate you."

"Congratulate me then," said Haggerty in what was almost a snarl. "You tried to have me killed."

"Not I," said Altemus, holding up a hand. "And I shouldn't advise you to try to take me apart." He touched the thing on his wrist, suddenly and noiselessly took off, rising ten feet above the floor and there remaining in a prone position.

"I assure you I have offensive weapons as well," he said. "Now, will you cease this foolishness and join me in some coffee. You appear to have had a hard night."

"Okay," said Haggerty. He knew when he was licked. His anger and outrage began to give way to a burning sense of curiosity. He wondered what this business was, to say nothing of what it was about. He began to frame questions mentally as he followed Altemus into a small breakfast room off the hall.

"I'm sorry about the butamizer in your kitchen," Altemus said, as a tall Negro brought the coffee and poured it. "I had to report the fact that you followed me, of course. The rest was done without either my knowledge or command."

"How did you get my name?" Haggerty inquired after taking a sip of the coffee, which was both hot and of fine flavor.

"Don't you think it would be surprising if I didn't know it?" Altemus coun-

tered. "After all, in view of the peculiar nature of my assignment, to say nothing of its risks . . ." He shrugged.

"Just what is the nature of your assignment?" said Haggerty bluntly. "That is, aside from snatching nice girls from nice homes? I was at the Campbell home tonight, saw them discover Laura's note." He said no more but his expression was eloquent.

"That, of course, is the rotten part of it," said Altemus and there was genuine pain in his sensitive face. "It so happens that we can best employ only girls from happy homes. Naturally, since we cannot reveal their fate, it makes the separation extremely hard on the parents. But we do what we can to help them afterward. If you take the trouble to check you'll discover that fortune has always smiled on those whose daughters we accept."

"Accept!" Haggerty all but snorted. "And how do the girls fare in your hands?"

"You will note that they come with us voluntarily," said Altemus quietly. "I assure you they have entirely satisfying and normal and, for the most part, happy roles to fulfill with us."

"*'Us'!*" said Haggerty. "Who is 'us'? Who are you? And what is this all about, anyway? What happens to the girls. Where do they go? And why do they leave their homes voluntarily—if indeed they do? Those are some of the things you must tell me, Altemus, or I'll have the entire Force down around your ears."

Altemus sighed. "I can prevent that so easily," he said. "I can, if I wish, destroy your entire force without harm to myself. Or I can—disappear. However, since my job is virtually ended, I suppose I can break silence. I assure you, however, that it will do you no good to tell what you are about to learn. For no one is going to believe you."

"I'll be the judge of that," growled Haggerty. He was angry not so much at Altemus as at himself for liking the man. But there was an odd fascination about him, a fascination in no way lessened by his air of utter and complete simplicity. Somehow you knew that this man would never trouble to tell a lie. If dissimulation were needed, he would either divert the conversation or remain silent.

"Very well," said Altemus.

HE picked up a spoon beside his coffee cup, looked into its bowl as he talked. "In the first place," said Altemus, "while my name is Ludovic Altemus and I was born here in New York, I am a citizen of a totally different solar system, some fifteen light years away."

"But you don't look different," protested Haggerty, incredulity battling with his desire to believe.

"My mother was a girl from Englewood," he said. "I'll give you some background. My planet and yours—this one—are the only two so far as we know in the entire galaxy which have produced this species. And our civilization is at least five thousand years older than yours. Hence these gadgets." He tapped his wrist.

"How come your mother was from Englewood?" said Haggerty.

"Because that's where she was born," said Altemus. Then he smiled, said, "Oh, I see. My father was a member of the first and only space-ship expedition to come to Earth from my planet. He was a lad of fourteen when he took off—a man of thirty-three when the ship landed. It landed in the Jersey Meadows and by that time, being a man, he was not averse to obeying orders to mate. Englewood was nearby. The result—at your service." Altemus bowed slightly.

"Why this business of orders to mate?" said Haggerty.

"Self preservation, pure and simple," said Altemus. "You see, a little more than five thousand years ago, my people discovered the principle of atomic fission. They were then much like you and—well, things happened."

"I understand," said Haggerty, thinking of the volatile, iridescent mushroom cloud he had seen rising above Bikini atoll while he was still in the Navy.

"For a long time there was talk of possible mutations but scientists, who had been working with our equivalent of your fast-breeding fruit-fly, pointed out that it would take hundreds of generations before any such mutations began to show.

"That time is now upon us. For the last five generations, our birth rate, which has been kept at absolute level for three thousand years, has been dwindling alarmingly—by almost exactly twenty-five per cent each thirty years. Our foolish forefathers have left us a heritage of female sterility."

"Then that is why you are here!" said Haggerty, frowning. "But it still doesn't make what you are doing right."

"We're making what reparations we can," said Altemus. "More than anyone will know. But self-preservation is our first law of nature, as it is yours. When the champagne vines of France were all but killed off by a blight in the last century, the French winemakers replenished them with vines from California—younger, stronger vines—and made champagne better than ever. I trust you get the analogy, Haggerty?"

"I do, but I still don't understand," said the detective. "How do you get the girls to—to your planet? You say you made only one trip here."

"I have made many trips both ways," said Altemus. "With our ship we brought matter transmitters, which we have set up in strategic spots around the world. The girls, when we tell them how important their role is, the lives they will lead, are willing enough. Naturally it is my job to select only girls who will adjust easily to their new environment, and that is the reason why they must be young. Surely you understand."

"I must be crazy," muttered Haggerty. "I must be."

"You aren't," said Altemus, smiling faintly. "The events of last night and this morning should prove that." He tapped the sparkling thing on his wrist. "This is, among its other uses, an anti-gravity device."

"Okay, I believe you," said the detective. His brow furrowed. "But how come you've stepped up your campaign lately?"

"That, of course, has been our chief difficulty," replied Altemus, his brow furrowed in turn. "But it has taken us a long time to get organized—since my father and his companions first proved that they could mate successfully with women of Earth. You have no idea how difficult it is to set up a reliable agency in a product—humanity if you will—whose exportation is illegal.

"When we had time, it was not difficult. We don't need vast numbers of girls to restore our race. We are incredibly long-lived and replacement need not be fast by Earth standards."

"These matter transmitters," said Haggerty, leaning forward, "how do they work?"

"That would be a little hard to explain in the time still at my disposal," said Altemus. He tapped the thing on his wrist again. "This is a tuner," he added. "It compensates for the vibrational difference between the individual and the transformer. Without it—" He shrugged and made an unpleasant face.

THE detective repressed a shudder. He changed the subject.

"What does your planet look like?" Haggerty asked.

"It's indescribable," said Altemus, "but very beautiful. We have learned how to balance our lives between the urban and the rural. We have abolished all but voluntary work. We have—but you would have to see it for yourself. Suffice it to say that none of the girls has ever had the slightest wish to come back to Earth."

"And if one of them did?" Haggerty asked sharply.

"We should send her back, after creating a memory block, of course. Otherwise we'd have people looking everywhere for our matter transmitters. Some of them would find one and would—vanish, unpleasantly. It is not an agreeable prospect."

"How come people haven't got caught in them?" Haggerty asked.

"They have occasionally," replied Altemus, "although we have set them up in secluded spots. When they are thrown back, they usually look as if a truck had run over them. You know of such bodies appearing from time to time. Naturally we place them on the roads. It would never do to have them found near our transmitters."

"Of course not," said Haggerty. He felt a certain helplessness at his host's inhuman logic and knowledge, as if he were being talked down to by an Einstein or something. It was not a pleasant sensation.

He longed to give Altemus a working over, if only for the sake of his own self-esteem, but knew within himself that he hadn't a chance.

"You said awhile back that your job was virtually ended," he said suddenly. "You also mentioned having to speed things up."

"Ah, yes," Altemus replied. "I shall miss it here." He paused to look about him fondly. "As a matter of fact, that is why I was so angry at your nearly being killed. There was really no need for it. You would not have had time to do wrong."

"You're a cold-blooded Joe," said Haggerty quietly.

"On the contrary," said Altemus. "But I attach no sentimental value to life for its own sake. No, our time here is just about run out. We got our orders, as I believe I said, some years ago and organized the current campaign. Our total is fifty thousand girls—out of more than a billion women they will hardly be missed. And we've had to do most of it in the past six months."

"But why?" Haggerty demanded. "Why the hurry?"

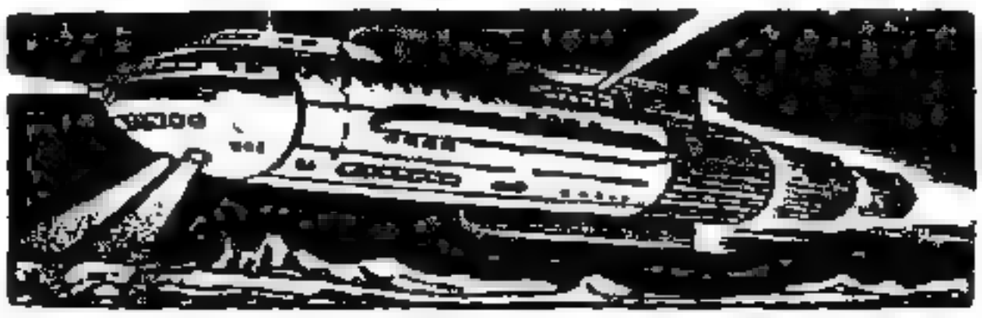
"The advice came from our ablest historians and psychiatrists," said Altemus. "As I say, it has taken time, almost too much time. We are just under the deadline."

"The deadline for what?" demanded Haggerty, feeling like a foolish child. Altemus smiled at him with sympathy.

"Perhaps—perhaps for nothing," he said. "But we received our first hurry-up order on July Twenty-fifth, Nineteen Forty-five."

"July Twenty-fifth?" said Haggerty, bewildered. He stared at Altemus, his eyes widening. "But that was the date of Alamogordo—the first A-bomb! How come the deadline now?"

Altemus rose. "Look in your newspaper when you get home," he said. "It will be there somewhere if you read carefully enough. As for me, I must get dressed. I'm afraid I have very little time left."



The Earthman was an alien on Venus—a man whose future lay millions of years in the past! Meet—

THE MAN FROM BEYOND

in the amazing novelet of that name

By JOHN BEYNON HARRIS

COMING NEXT ISSUE!

THE IDEAL

By STANLEY G. WEINBAUM

THIS," said the Franciscan, "is my Automaton, who at the proper time will speak, answer whatsoever question I may ask and reveal all secret knowledge to me." He smiled as he laid his hand affectionately on the iron skull that topped the pedestal.

The youth gazed open-mouthed, first at the head and then at the Friar. "But it's iron!" he whispered. "The head is iron, good father."

"Iron without, skill within, my son," said Roger Bacon. "It will speak at the proper time and in its own manner, for so have I made it.

"A clever man can twist the devil's arts to God's ends, thereby cheating the fiend—Sst! There sounds vespers! *Plena gratia, ave Virgo—*"

But it did not speak. Long hours, long weeks, the doctor mirabilis watched his creation but the iron lips were silent and the iron eyes dull. No voice but the great man's own sounded in his monkish cell, nor was

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"Time is!" said the image and smiled benignly.

The Friar looked up. "Time is, indeed," he echoed. "Time it is that you give utterance and to some assertion less obvious than that time is. For of course time is, else there were nothing at all. Without time—"

"Time was!" rumbled the image, still smiling but sternly as the statue of Draco.

"Indeed time was," said the Monk. "Time was, is and will be, for time is that medium in which events occur. Matter exists in space, but events—"

The image smiled no longer. *"Time is past!"* it roared in tones deep as the cathedral bell outside, and burst into ten thousand pieces.

"There," said old Haskel van Manderpootz, shutting the book, "is my classical authority in this experiment. This story,

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overlaid as it is with mediaeval myth and legend, proves that Robert Bacon himself attempted the experiment—and failed." He shook a long finger at me.

"Yet do not get the impression, Dixon, that Friar Bacon was not a great man. He was—extremely great, in fact. He lighted the torch that his namesake Francis Bacon took up four centuries later, that van Manderpootz now rekindles."

I stared in silence.

"Indeed," resumed the Professor, "Roger Bacon might almost be called a thirteenth-century van Manderpootz, or van Manderpootz a twenty-first century Roger Bacon. His *Opus Major*, *Opus Minor* and *Opus Tertium*—"

"What," I interrupted impatiently, "has all this to do with that?" I indicated the clumsy metal robot standing in the corner of the laboratory.

"Don't interrupt!" snapped van Manderpootz. "I'll—"

AT THIS point I fell out of my chair. The mass of metal had ejaculated something like "A-a-gh-rasp" and had lunged a single pace toward the window, arms upraised.

"What the—!" I sputtered as the thing dropped its arms and returned stolidly to its place.

"A car must have passed in the alley," said van Manderpootz indifferently. "Now, as I was saying, Roger Bacon—"

I ceased to listen. When van Manderpootz is determined to finish a statement interruptions are worse than futile. As an ex-student of his, I *know*. So I permitted my thoughts to drift to certain personal problems of my own, particularly "Tips" Alva, who was the most pressing problem of the moment.

Yes, I mean Tips Alva the 'vision dancer, the little blonde imp who entertains on the Yerba Mate hour for that Brazilian company. Chorus girls, dancers and television stars are a weakness of mine. Maybe it indicates that there's a latent artistic soul in me. Maybe.

I'm Dixon Wells, you know, scion of the N. J. Wells Corporation, Engineers Extraordinary. I'm supposed to be an engineer myself;—I say supposed, because in the seven years since my graduation, my father hasn't given me much opportunity to prove it.

He has a strong sense of the value of time and I'm cursed with the unenviable quality of being late to anything and for everything. He even asserts that the occasional designs I submit are Late Jacobean but that isn't fair. They're Post-Romanesque.

Old N. J. also objects to my penchant for ladies of the stage and 'vision screen, and periodically threatens to cut my allowance, though that's supposed to be a salary. It's inconvenient to be so dependent and sometimes I regret the unfortunate market crash of 2009 that wiped out my own money, although it did keep me from marrying "Whimsy" White. Van Manderpootz, through his subjunctivisor, succeeded in proving that that would have been a catastrophe But it turned out nearly as much of a disaster anyway as far as my feelings were concerned It took me months to forget Joan Caldwell and her silvery eyes. That was just another instance when I was a little late.

Van Manderpootz himself is my old Physics Professor, head of the Department of New Physics at N.Y.U. and a genius, but a bit eccentric. Judge for yourself.

"And that's the theory," he said suddenly, interrupting my thoughts.

"Eh? Oh, of course. But what's that grinning robot got to do with it?"

He purpled. "I've just told you!" he roared. "Idiot! Imbecile! To dream while van Manderpootz talks! Get out! Get out!"

I got. It was late anyway, so late that I overslept more than usual in the morning and suffered more than the usual lecture on promptness from my father at the office.

Van Manderpootz had forgotten his anger by the next time I dropped in for an evening. The robot still stood in the corner near the window and I lost no time in asking its purpose.

"It's just a toy I had some of the students construct," he explained. "There's a screen of photoelectric cells behind the right eye, so connected that when a certain pattern is thrown on them it activates the mechanism The thing's plugged into the light-circuit but it really ought to run on gasoline."

"Why?"

"Well, the pattern it's set for is the shape of an automobile. See here." He picked up a card from his desk, cut in the outlines of a streamlined car like those of that year. "Since

only one eye is used," he continued, "the thing can't tell the difference between a full-sized vehicle at a distance and this small outline nearby. It has no sense of perspective."

He held the bit of cardboard before the eye of the mechanism. Instantly came its roar of "A-a-gh-rasp!" and it leaped forward a single pace, arms upraised. Van Manderpootz withdrew the card and again the thing relapsed stolidly into its place.

"What's it for?"

"Does van Manderpootz ever do work without reason back of it? I use it as a demonstration in my seminar."

"To demonstrate what?"

"The power of reason," said van Manderpootz solemnly.

"How? And why ought it to work on gasoline instead of electric power?"

"One question at a time, Dixon. You have missed the grandeur of van Manderpootz's concept. This creature, imperfect as it is, represents the predatory machine. It is the mechanical parallel of the tiger, lurking in its jungle to leap on living prey. *This* monster's jungle is the city. Its prey is the unwary machine that follows the trails called streets. Understand?"

"No."

"Picture this automaton, not as it is but as van Manderpootz could make it if he wished. It lurks gigantic in the shadows of buildings. It creeps stealthily through dark alleys. It skulks on deserted streets with its gasoline engine purring quietly.

"Then—an unsuspecting automobile flashes its image on the screen back of its eyes. It leaps. It seizes its prey, swinging it in steel arms to its steel jaws. Through the metal throat of its victim crash steel teeth.

"The blood of its prey—the gasoline, that is—is drained into its stomach or its gas tank. With renewed strength it flings away the husk and prowls on to seek other prey. It is the machine-carnivore, the tiger of mechanics."

I SUPPOSE I stared dumbly enough. It occurred to me suddenly that the brain of the great van Manderpootz was cracking

"What the—" I gasped.

"That," he said blandly, "is but a concept. I have many another use for the toy. I can prove anything with it, anything I wish."

"You can? Then prove something."

"Name your proposition, Dixon."

I hesitated, nonplussed.

"Come!" he said impatiently. "Look here—I will prove that anarchy is the ideal government or that Heaven and Hell are the same place, or that—"

"Prove that!' I said. "About Heaven and Hell."

"Easily. First we shall endow my robot with intelligence. I add a mechanical memory by means of the old Cushman delayed valve. I add a mathematical sense with any of the calculating machines. I give it a voice and a vocabulary with the magnetic-impulse wire phonograph.

"Now the point I make is this—granted an intelligent machine, does it not follow that every other machine constructed like it must have the identical qualities? Would not each robot given the same insides have exactly the same character?"

"No!" I snapped. "Human beings can't make two machines exactly alike. There'd be tiny differences. One would react quicker than others or one would prefer Fox Air-splitters as prey while another reacted most vigorously to Carnecars. In other words they'd have—*individuality!*" I grinned in triumph.

"My point exactly," observed van Manderpootz. "You admit then that this individuality is the result of imperfect workmanship. If our means of manufacture were perfect all robots would be identical and this individuality would not exist. Is that true?"

"I—suppose so."

"Then I argue that our own individuality is due to our falling short of perfection. All of us—even van Manderpootz—are individuals only because we are not perfect. Were we perfect, each of us would be exactly like everyone else. True?"

"Uh—yes."

"But Heaven, by definition, is a place where all is perfect. Therefore, in Heaven, everybody is exactly like everybody else and *therefore*, everybody is thoroughly and completely bored! There is no torture like boredom, Dixon, and—well, have I proved my point?"

I was floored. "But—about anarchy, then?" I stammered.

"Simple. Very simple for van Mander-

pootz. With a perfect nation—that is, one whose individuals are all exactly alike, which I have just proved to constitute perfection—with a perfect nation, I repeat, laws and government are utterly superfluous.

"If everybody reacts to stimuli in the same way laws are quite useless, obviously. If, for instance, a certain event occurred that fight lead to a declaration of war, why everybody in such a nation would vote for war at the same instant.

"Therefore government is unnecessary and therefore anarchy is the ideal government, since it is the proper government for a perfect race." He paused. "I shall now prove that anarchy is *not* the ideal government."

"Never mind!" I begged. "Who am I to argue with van Manderpootz? But is *that* the whole purpose of this dizzy robot—just a basis for logic?" The mechanism replied with its usual rasp as it leaped toward some vagrant car beyond the window.

"Isn't that enough?" growled van Manderpootz. "However—" his voice dropped—"I have even a greater destiny in mind. My boy, van Manderpootz has solved the riddle of the universe!" He paused impressively. "Well, why don't you say something?"

"Uh!" I gasped. "It's—uh—marvelous!"

"Not for van Manderpootz," he said modestly.

"But—what is it?"

"Eh—oh!" He frowned. "Well, I'll tell you, Dixon. You won't understand but I'll tell you." He coughed. "As far back as the early twentieth century," he resumed, "Einstein proved that energy is particular. Matter is also particular and now van Manderpootz adds that space and time are discreet!"

He glared at me.

"Energy and matter are particular," I murmured, "and space and time are discreet! How very moral of them!"

"Imbecile!" he blazed. "To pun on the words of van Manderpootz! You know very well that I mean particular and discreet in the physical sense. Matter is composed of *particles,* therefore it is particular.

"The particles of matter are called electrons, protons and neutrons—those of energy, quanta. I now add two others—the particles of space I call spations—those of time, chronons."

SO I asked, "And what in Gehenna are particles of space and time?"

"Just what I said!" snapped van Manderpootz. "Exactly as the particles of matter are the smallest pieces of matter that can exist—just as there is no such thing as a half of an electron or for that matter half a quantum—so the chronon is the smallest possible bit of space. Neither time nor space is continuous. Each is composed of infinitely tiny fragments."

"How long is a chronon in time? How big is a spation in space?"

"Van Manderpootz has even measured that. A chronon is the length of time it takes one quantum of energy to push one electron from one electronic orbit to the next. There can obviously be no shorter interval of time, since an electron is the smallest unit of matter and the quantum the smallest unit of energy. And a spation is the exact volume of a proton. Since nothing smaller exists, that is obviously the smallest unit of space."

"Look here," I argued. "Then what's in between these particles of space and time? If time moves, as you say, in jerks of one chronon each, what's between the jerks?"

"Ah!" said the great van Manderpootz. "Now we come to the heart of the matter. In between the particles of space and time, inside the particles of matter and energy, must obviously be something that is neither space, time, matter nor energy.

"A hundred years ago Shapley anticipated van Manderpootz in a vague way when he announced his cosmoplasma, the great underlying matrix in which time and space and the universe are embedded.

"Now van Manderpootz announces the ultimate unit, the universal particle, the focus in which matter, energy, time and space meet, the unit from which electrons, protons, neutrons, quanta, spations and chronons are all constructed. The riddle of the universe is solved by what I have chosen to name the cosmon." His blue eyes bored into me.

"Magnificent!" I said feebly, knowing that some such word was expected. "But what good is it?"

"What *good* is it?" he roared. "It pro-

vides—or will provide, once I work out a few details—the means of turning energy into time, space into matter, time into space or—" He sputtered into silence. "Fool!" he muttered. "To think that you studied under the tutelage of van Manderpootz. I blush—I actually blush!"

One couldn't have told that he was blushing. His face was always rubicund enough. "Colossal!" I said hastily. "What a mind!"

That mollified him. "But that's not all," he proceeded. "Van Manderpootz never stops short of perfection. I now announce the unit particle of thought—the psychon!"

This was a little too much. I simply stared.

"Well may you be dumbfounded," said van Manderpootz. "I presume you are aware, by hearsay at least, of the existence of thought. The psychon, unit of thought, is one electron plus one proton, which are bound so as to form one neutron, embedded in one cosmon, occupying a volume of one spation, driven by one quantum for a period of one chronon. Very obvious—very simple."

"Oh, very!" I echoed. "Even I can see that that equals one psychon."

He beamed. "Excellent! Excellent!"

"And what," I asked, "will you do with the psychons?"

"Ah," he rumbled. "Now we go even *past* the heart of the matter and return to Isaak here." He jammed a thumb toward the robot. "Here I shall create Roger Bacon's mechanical head. In the skull of this clumsy creature will rest such intelligence as not even van Manderpootz—I should say as only van Manderpootz—can conceive. It remains merely to construct my idealizator."

"Your idealizator?"

"Of course. Have I not just proven that thoughts are as real as matter, energy, time or space? Have I not just demonstrated that one can be transformed, through the cosmon, into any other? My idealizator is the means of transforming psychons to quanta, just as, for instance, a Crookes tube or x-ray tube transforms matter to electrons.

"I shall make your thoughts visible—not your thoughts as they are in that numb brain of yours, but in *ideal* form. Do you see? The psychons of your mind are the same as those from any other mind, just as all electrons are identical, whether from gold or iron.

"Yes! Your psychons"—his voice quavered—"are identical with those in the mind of—van Manderpootz!" He paused, shaken.

"Actually?" I gasped.

"Actually. Fewer in number, of course, but identical. Therefore my idealizator shows your thought released from the impress of your personality. It shows it—ideal!"

I was late to the office again.

A WEEK later I thought of van Manderpootz. Tips was on tour somewhere and I didn't dare take anyone else out because I'd tried it once before and she'd heard about it. So, with nothing to do, I finally dropped around to the professor's quarters, found him missing and eventually located him in his laboratory at the Physics Building.

He was puttering around the table that had once held that subjunctivisor of his. Now it supported an indescribable mess of tubes and tangled wires, its most striking feature a circular plane mirror etched with a grating of delicately scratched lines.

"Good evening, Dixon," he rumbled.

I echoed his greeting. "What's that?" I asked.

"My idealizator. A rough model, much too clumsy to fit into Isaak's iron skull. I'm just finishing it to try it out." He turned a glittering blue eye on me. "How fortunate that you're here. It will save the world a terrible risk."

"A risk?"

"Yes. It is obvious that too long an exposure to the device will extract too many psychons, and leave the subject's mind in a sort of moronic condition. I was about to accept the risk but I see now that it would be woefully unfair to the world to endanger the mind of van Manderpootz. But you are at hand and will do very well."

"Oh no I won't!"

"Come, come!" he said, frowning. "The danger is negligible. In fact I doubt whether the device will be able to extract *any* psychons from *your* mind. At any rate you will be perfectly safe for a period of at least half an hour.

"I, with a vastly more productive mind, could doubtless stand the strain indefinitely."

"Well, I'm not!" But my protest was feeble and after all, despite his overbearing mannerisms, I knew van Manderpootz liked me. I was positive he would not expose me to any real danger. In the end I found myself seated before the table, facing the etched mirror.

"Put your face against the barrel," said van Manderpootz, indicating a stovepipe-like tube. "That's merely to cut off extraneous sight, so you can see only the mirror. Go ahead, I tell you! It's no more than the barrel of a telescope or microscope."

I complied. "Now what?" I asked.

"What do you see?"

"My own face in the mirror."

"Of course. Now I start the reflector rotating." There was a faint whir and the mirror was spinning smoothly, still with only a slightly blurred image of myself.

"Listen, now," continued van Manderpootz. "Here is what you are to do. You will think of a generic noun. 'House,' for instance. If you think of house you will see, not an individual house but your ideal house, the house of all your dreams and desires.

"If you think of horse you will see what your mind conceives as the perfect horse, such a horse as dream and longing create. Do you understand? Have you chosen a topic?"

"Yes." After all I was only twenty-eight. The noun I had chosen was—girl.

"Good," said the professor. "I turn on the current."

There was a blue radiance behind the mirror. My own face still stared back at me from the spinning surface but something was forming behind it, building up, growing. I blinked. When I focused my eyes again, it was—*she* was—there.

I can't begin to describe her. I don't even know if I saw her clearly that first time. It was like looking into another world and seeing the embodiment of all longings, dreams, aspirations and ideals. It was so poignant a sensation that it crossed the borderline into pain. It was—well, exquisite torture or agonized delight. It was at once unbearable and irresistible.

But I gazed—I had to. There was a haunting familiarity about the impossibly beautiful features. I had seen the face somewhere—sometime. In dreams? No. I realized suddenly the source of that familiarity.

This was no living woman but a synthesis. Her lips were the perfect bow of Tips Alva. Her silvery eyes and dusky velvet hair were those of Joan Caldwell. But the aggregate, the sum total, the face in the mirror—that was none of these. It was a face impossibly, incredibly, outrageously beautiful.

ONLY her face and throat were visible and the features were cool, expressionless, still as a carving. I wondered suddenly if she could smile and with the thought she did. If she had been lovely before, now her beauty flamed to such a pitch that it was—well, insolent.

It was an affront to be so lovely—it was insulting. I felt a wild surge of anger that the image before me should flaunt such beauty and yet be—*non-existent!* It was deception, cheating, fraud, a promise that could never be fulfilled.

Anger died in the depths of that fascination. I wondered what the rest of her was like and she moved gracefully back until her full figure was visible. I must be a prude at heart, for she wasn't wearing the usual cuirass-and shorts of that year but an iridescent four-paneled costume that all but concealed her dainty knees.

Her form was slim and erect as a column of cigarette smoke in still air and I knew that she could dance like a fragment of mist on water. And with that thought she moved, dropping in a low curtsy and looking up with the faintest possible flush crimsoning the curve of her throat. Yes, I must be a prude at heart—despite Tips Alva and Whimsy White and the rest, my ideal was modest.

It was unbelievable that the mirror was simply giving back my thoughts. She seemed as real as myself and—after all—I guess she was. As real as myself, no more no less, because she was part of my own mind.

At this point I realized that van Manderpootz was shaking me and bellowing "Your time's up. Come out of it! Your half-hour's up!"

He must have switched off the current. The image faded and I took my face from

the tube, dropping it on my arms.

"O-o-o-o-o-oh!" I groaned.

"How do you feel?" he snapped.

"Feel? All right—physically." I looked up.

Concern flickered in his blue eyes. "What's the cube root of four-nine-one-three?" he crackled sharply.

I've always been quick at figures. "It's—uh—seventeen," I returned dully. "Why the—"

"You're all right mentally," he announced. "Now—why were you sitting there like a dummy for half an hour? My idealizator must have worked, as is only natural for a van Manderpootz creation, but what were you thinking of?"

"I thought—I thought of a 'girl,'" I groaned.

He snorted. "Hah! You would, you idiot! 'House' or 'horse' wasn't good enough. You had to pick something with emotional connotations. Well, you can start right in forgetting her because she doesn't exist."

I couldn't give up hope as easily as that. "But can't you—can't you—?" I didn't even know what I meant to ask.

"Van Manderpootz," he announced, "is a mathematician, not a magician. Do you expect me to materialize an ideal for you?"

When I had no reply but a groan, he continued. "Now I think it safe enough to try the device myself. I shall take—let's see—the thought 'man.' I shall see what the superman looks like, since the ideal of van Manderpootz can be nothing less than superman." He seated himself.

"Turn that switch," he said. "Now!"

I did. The tubes glowed into slow blue life. I watched dully, disinterestedly. Nothing held any attraction for me after that image of the ideal.

"Huh!" said van Manderpootz suddenly. "Turn it on, I say! I see nothing but my own reflection."

I stared, then burst into a hollow laugh. The mirror was spinning, the banks of tubes glowing, the device operating.

Van Manderpootz raised his face, a little redder than usual. I laughed hysterically.

"After all," he said huffily, "one might have a lower ideal of man than van Manderpootz. I see nothing nearly so humorous as your situation."

The laughter died. I went miserably home, spent half the remainder of the night in morose contemplation, smoked nearly two packs of cigarettes, didn't go to the office at all the next day.

Tips Alva got back to town for a weekend broadcast but I didn't even bother to see her, just phoned her and told her I was sick. I guess my face lent credibility to the story, for she was duly sympathetic and her face in the phone screen was quite anxious.

Even at that I couldn't keep my eyes away from her lips because, except for a bit too-lustrous make-up, they were the lips of the ideal. But they weren't enough—they just weren't enough.

Old N. J. began to worry again. I couldn't sleep late of mornings any more and after missing that first day I kept getting down earlier and earlier until one morning I was only ten minutes late. He called me in at once.

"Look here, Dixon," he said. "Have you been to a doctor recently?"

"I'm not sick," I said listlessly.

"Then for Heaven's sake marry the girl! I don't care what chorus she kicks in, marry her and act like a human being again."

"I can't."

"Oh. She's already married, eh?"

WELL, I couldn't tell him she didn't exist. I couldn't say I was in love with a vision, a dream, an ideal. He thought I was a little crazy anyway, so I just muttered "Yeah," and didn't argue. He said gruffly, "Then you'll get over it. Take a vacation. Take *two* vacations. You might as well for all the good you are around here."

I didn't leave New York. I lacked the energy. I just mooned around the city for a while, avoiding my friends and dreaming of the impossible beauty of the face in the mirror. And by and by the longing to see that vision of perfection once more began to grow overpowering.

I don't suppose anyone but I can understand the lure of that memory. The face, you see, had been my ideal, my concept of perfection. One sees beautiful women here and there in the world. One falls in love but always, no matter how great their beauty nor how deep one's love, they fall short in some degree of the secret vision of the ideal.

Not the mirrored face. She *was* my ideal

and therefore, whatever imperfections she might have had in the minds of others, in my eyes she had none. None, that is, save the terrible one of being only an ideal and therefore unattainable. But that is a fault inherent in all perfection.

It was a matter of days before I yielded. Common sense told me it was futile, even foolhardy, to gaze again on the vision of perfect desirability. I fought against the hunger but I fought hopelessly and was not at all surprised to find myself one evening rapping on van Manderpootz's door in the University Club.

He wasn't there. I'd been hoping he wouldn't be, since it gave me an excuse to seek him in his laboratory in the Psychis Building, to which I would have dragged him anyway.

There I found him, writing some sort of notations on the table that held the idealizator.

"Hello, Dixon," he said. "Did it ever occur to you that the ideal university cannot exist? Naturally not, since it must be composed of perfect students and perfect educators, in which case the former could have nothing to learn and the latter nothing to teach."

What interest had I in the perfect university and its inability to exist? My whole being was desolate over the non-existence of another ideal.

"Professor," I said tensely, "may I use that—that thing of yours again? I want to—uh—see something."

My voice must have disclosed the situation, for van Manderpootz looked up sharply. *"So!"* he snapped. "Do you disregard my advice? Forget her, I said. Forget her because she doesn't exist."

"But I can't. Once more, Professor—only once more!"

He shrugged, but his blue metallic eyes were a little softer than usual. After all, for some inconceivable reason, he liked me.

"Well, Dixon," he said, "you're of age and supposed to be of mature intelligence. I tell you that this is a very stupid request and van Manderpootz always knows what he's talking about. If you want to stupefy yourself with the opium of impossible dreams go ahead.

"This is the last chance you'll have, for tomorrow the idealizator of van Manderpootz goes into the Bacon head of Isaak there. I shall shift the oscillators so that the psychons, instead of becoming light quanta, emerge as an electron flow—a current which will actuate Isaak's vocal apparatus and come out as speech." He paused, musing.

"Van Manderpootz will hear the voice of the ideal. Of course Isaak can return only what psychons he receives from the brain of the operator but just like the images in the mirror, the thoughts will have lost their human impress and the words will be those of an ideal." He perceived that I wasn't listening, I suppose. "Go ahead, imbecile!" he grunted.

I did. The glory that I hungered after flamed slowly into being, incredible in loveliness and somehow, unbelievably, even more beautiful than on the other occasion.

I know why now. Long afterward van Manderpootz explained that the very fact that I had seen an ideal once before had altered my ideal, raised it to a higher level. With that face among my memories my concept of perfection was different from what it had been.

So I gazed and hungered. Readily and instantly the being in the mirror responded to my thoughts with smile and movement. When I thought of love her eyes blazed with such tenderness that it seemed as if I—J. Dixon Wells—were part of those pairs who had made the great romances of the world, Heloise and Abelard, Tristan and Isolde, Aucassin and Nicolette.

It was like the thrust of a dagger to feel van Manderpootz shaking me, to hear his gruff voice calling, "Out of it! Out of it! Time's up."

I GROANED and dropped my face on my hands. The Professor had been right, of course. This insane repetition had only intensified an unfulfillable longing, had made a bad mess ten times as bad. Then I heard him muttering behind me.

"Strange!" he murmured. "In fact, fantastic. Oedipus—Oedipus of the magazine covers and billboards."

I looked dully around. He was standing behind me, squinting, apparently, into the spinning mirror beyond the end of the black tube. "Huh?" I grunted wearily.

"That face," he said. "Very queer. You must have seen her features on a hundred

magazines, on a thousand billboards, on countless 'vision broadcasts. The Oedipus complex in a curious form."

"Eh? Could you see her?"

"Of course!" he grunted. "Didn't I say a dozen times that the psychons are transmuted to perfectly ordinary quanta of visible light? If you could see her why not I?"

"But—what about billboards and all?"

"That face," said the professor slowly. "It's somewhat idealized, of course, and certain details are wrong. Her eyes aren't that pallid silver blue you imagined. They're green—seagreen, emerald colored."

"What the devil," I asked hoarsely, "are you talking about?"

"About the face in the mirror. It happens to be, Dixon, a close approximation of the features of de Lisle d'Agrion, the Dragon Fly!"

"You mean—she's real? She exists? She lives? She—"

"Wait a moment, Dixon. She's real enough, but in accordance with your habit you're a little late. About twenty-five years too late, I would say. She must now be somewhere in the fifties—let's see—fifty-three, I think. But during your very early childhood you must have seen her face pictured everywhere—de Lisle d'Agrion, the Dragon Fly."

I could only gulp. The blow was devastating.

"You see," continued van Manderpootz, "one's ideals are implanted very early. That's why you continually fall in love with girls who possess one or another feature that reminds you of her, her hair, her nose, her mouth, her eyes. Very simple but curious."

"Curious!" I blazed. "Curious, you say! Every time I look into one of your cursed contraptions I find myself in love with a myth! A girl who's dead or married or unreal or turned into an old woman! Curious, eh? Yeah—funny, isn't it?"

"Just a moment," said the professor placidly. "It happens, Dixon, that she has a daughter. What's more, Denise resembles her mother. And what's still more, she's arriving in New York next week to study American letters at the University here. She writes, you see."

That was too much. "How—how do *you* know?" I gasped.

It was one of the few times I have seen the colossal blandness of van Manderpootz ruffled. He reddened a trifle, and said slowly, "It also happens, Dixon, that many years ago in Amsterdam, Haskel van Manderpootz and de Lisle d'Agrion were—very friendly.

"More than friendly, I might say, but for the fact that two such powerful personalities as the Dragon Fly and van Manderpootz were always at odds." He frowned. "I was almost her second husband. She's had seven, I believe. Denise is the daughter of the third."

"Why is she coming here?"

"Because," he said with dignity, "van Manderpootz is here. I am still a friend of de Lisle." He turned and bent over the complex device on the table. "Hand me that wrench," he ordered. "Tonight I dismantle this and tomorrow start reconstructing it for Isaak's head."

But when, the following week, I rushed eagerly back to van Manderpootz's laboratory, the idealizator was still in place. The professor greeted me with a humorous twist to what was visible of his bearded mouth.

"Yes, it's still here," he said, gesturing at the device. "I've decided to build an entirely new one for Isaak and besides, this one has afforded me considerable amusement. Furthermore, in the words of Oscar Wilde, who am I to tamper with a work of genius? After all, the mechanism is the product of the great van Manderpootz."

He was deliberately tantalizing me. He knew that I hadn't come to hear him discourse on Isaak or even on the incomparable van Manderpootz. Then he smiled and softened and turned to the little inner office adjacent to the room where Isaak stood in metal austerity.

"Denise!" he called, "Come here."

I don't know exactly what I expected but I do know that the breath left me as the girl entered. She wasn't exactly my image of the ideal, of course. She was perhaps the merest trifle slimmer and her eyes—well, they must have been much like those of de Lisle d'Agrion, for they were the clearest emerald I've ever seen.

They were impudently direct eyes and I could imagine why van Manderpootz and the Dragon Fly might have been forever quarreling. That was easy to imagine, looking

into the eyes of the Dragon Fly's daughter.

NOR was Denise, apparently, quite as femininely modest as my image of perfection. She wore the extremely unconcealing costume of the day, which covered, I suppose, about as much of her as one of the Bikini swim suits of the middle years of the twentieth century.

She gave an impression not so much of fleeting grace as of litheness and supple strength, an air of independence, frankness and—I say it again—impudence.

"Well!" she said coolly as van Manderpootz presented me. "So *you're* the scion of the N. J. Wells Corporation. Every now and then your escapades enliven the Paris Sunday supplements. Wasn't it you who snared a million dollars in the market so you could ask Whimsy White—?"

I flushed. "That was greatly exaggerated," I said hastily, "and anyway I lost it back before we—uh—before I—"

"Not before you made somewhat of a fool of yourself, I believe," she finished sweetly.

That's the sort she was. If she hadn't been so infernally lovely, if she hadn't *looked* so much like the face in the mirror I'd have flared up, said, "Pleased to have met you," and never have seen her again. But I couldn't get angry, not when she had the dusky hair, the perfect lips, the saucy nose of the being who to me was ideal.

So I *did* see her again and several times again. In fact, I suppose I occupied most of her time between the few literary courses she was taking. Little by little I began to see that in other respects besides the physical she was not so far from my ideal.

Beneath her impudence were honesty and frankness and, despite herself, sweetness. Even allowing for the head start I'd had I fell in love pretty hastily. And what's more I knew she was beginning to reciprocate.

That was the situation when I called for her one noon and took her over to van Manderpootz' laboratory. We were to lunch with him at the University Club but we found him occupied in directing some experiment in the big laboratory beyond his personal one, untangling some mess that his staff had blundered into.

So Denise and I wandered back into the smaller room, perfectly content to be alone together. I simply couldn't feel hungry in her presence—just talking to her was enough of a substitute for food.

"I'm going to be a good writer," she was saying musingly. "Some day, Dick, I'm going to be famous."

Everyone knows how correct that prediction was. I agreed with her instantly.

She smiled. "You're nice, Dick," she said "Very nice."

"Very?"

"Very!" she said emphatically. Then her green eyes strayed to the table that held the idealizator. "What crack-brained contraption of Uncle Haskel's is that?" she asked.

I explained, rather inaccurately, I'm afraid No ordinary engineer can follow the ramifications of a van Manderpootz conception Nevertheless Denise caught the gist of it and her eyes glowed emerald fire.

"It's fascinating!" she exclaimed. She rose and moved over to the table. "I'm going to try it."

"Not without the professor, you won't! It might be dangerous."

That was the wrong thing to say. The green eyes glowed brighter as she cast me a whimsical glance. "But I am," she said. "Dick, I'm going to—see my ideal man!" She laughed softly.

I was panicky. Suppose her ideal turned out tall and dark and powerful instead of short and sandy haired and a bit—well, chubby, as I am.

"No!" I said vehemently. "I won't let you!"

She laughed again. I suppose she read my consternation, for she said softly, "Don't be silly, Dick." She sat down, placed her face against the opening of the barrel and commanded, "Turn it on."

I couldn't refuse her. I set the mirror whirling, then switched on the bank of tubes. Then immediately I stepped behind her, squinting into what was visible of the flashing mirror, where a face was forming slowly —vaguely.

I thrilled. Surely the hair of the image was sandy. I even fancied now that I could trace a resemblance to my own features. Perhaps Denise sensed something similar, for she suddenly withdrew her eyes from the tube and looked up with a faintly embarrassed flush, a thing most unusual for her.

"Ideals are dull!" she said. "I want a real thrill. Do you know what I'm going to see?

I'm going to visualize ideal horror. That's what I'll do. I'm going to see absolute horror!"

"Oh no you're not!" I gasped. "That's a terribly dangerous idea." Off in the other room I heard the voice of van Manderpootz calling, "Dixon!"

"Dangerous—bosh!" Denise retorted. "I'm a writer, Dick. All this means to me is material. It's experience and I want it."

Van Manderpootz called again. "Dixon! *Dixon!* Come here."

I said, "Listen, Denise. I'll be right back. Don't try anything until I'm here—please!"

I DASHED into the big laboratory. Van Manderpootz was facing a cowed group of assistants, quite apparently in extreme awe of the great man.

"Hah, Dixon!" he rasped. "Tell these fools what an Emmerich valve is and why it won't operate in a free electronic stream. Let 'em see that even an ordinary engineer knows that much."

Well, an ordinary engineer doesn't but it happened that I did. Not that I'm particularly exceptional as an engineer but I *did* happen to know that one. A year or two before I'd done some work on the big tidal turbines up in Maine, where they have to use Emmerich valves to guard against electrical leakage from the tremendous potentials in their condensers.

So I started explaining and Van Manderpootz kept interpolating sarcasms about his staff. When I finally finished I suppose I'd been in there about half an hour. And then —*then* I remembered Denise!

I left van Manderpootz staring as I rushed back and sure enough, there was the girl with her face pressed against the barrel, her hands gripping the table edge. Her features were hidden, of course, but there was something about her strained position, her white knuckles—

"Denise!" I yelled. "Are you all right? *Denise!*"

She didn't move. I stuck my face in between the mirror and the end of the barrel and peered up the tube at her visage. What I saw left me all but stunned. Have you ever seen stark, mad, infinite terror on a human face?

That was what I saw in Denise's—inexpressible unbearable horror, worse than the fear of death could ever be. Her green eyes were widened so that the whites showed around them, her perfect lips were contorted, her whole face strained into a mask of sheer terror.

I rushed for the switch but in passing I caught a single glimpse of—of what showed in the mirror. Incredible! Obscene, terror-laden, horrifying things—there just aren't words for them. There *are* no words.

Denise didn't move as the tubes darkened. I raised her face from the barrel and when she glimpsed me she did move. She flung herself out of that chair and away, facing me with such mad terror that I halted.

"Denise!" I cried. "It's just Dick. Look, Denise!"

But as I moved toward her she uttered a choking scream, her eyes dulled, her knees gave and she fainted. Whatever she had seen, it must have been appalling, for Denise was not the sort to faint.

It was a week later that I sat facing van Manderpootz in his little inner office. The grey metal figure of Isaak was missing and the table that had held the idealizator was empty.

"Yes," said van Manderpootz. "I've dismantled it. One of van Manderpootz' few mistakes was to leave it around where a pair of incompetents like you and Denise could get to it. It seems that I continually overestimate the intelligence of others. I suppose I tend to judge them by the brain of van Manderpootz."

I said nothing. I was thoroughly disheartened and depressed. Whatever the professor said about my lack of intelligence I felt was justified.

"Hereafter," resumed van Manderpootz, "I shall credit nobody except myself with intelligence and will doubtless be much more nearly correct." He waved a hand at Isaak's vacant corner.

"Not even the Bacon head," he continued. "I've abandoned that project, because, when you come right down to it, what need has the world of a mechanical brain when it already has that of van Manderpootz?"

"Professor," I burst out suddenly, "why won't they let me see Denise? I've been at the hospital every day and they let me into her room just once—just once and that time she went into a fit of hysterics. Why? Is she—?" I gulped.

"She's recovering nicely, Dixon."

"Then why can't I see her?"

"Well," said van Manderpootz placidly, "it's like this. You see, when you rushed into the laboratory there, you made the mistake of pushing your face in front of the barrel. She saw your features right in the midst of all those horrors she had called up.

"Do you see? From then on your face was associated in her mind with the whole hell's brew in the mirror. She can't even look at you without seeing all of it again."

"*Good grief!*" I gasped. "But she'll get over it, won't she? She'll forget that part of it?"

"The young psychiatrist who attends her—a bright chap, by the way, with a number of my own ideas—believes she'll be over it in a couple of months. But personally, Dixon, I don't think she'll ever welcome the sight of your face, though I myself have seen uglier visages somewhere or other."

I ignored that. "Lord!" I groaned. "What a mess!" I rose to depart and then—then I knew what inspiration means!

"Listen!" I said, spinning back. "Listen, Professor! Why can't you get her back here and let her visualize the ideally beautiful? And then I'll—I'll stick my face into that!" Enthusiasm grew. "It *can't* fail!" I cried. "At the worst, it'll cancel that other memory. It's marvelous!"

"But as usual," said van Manderpootz, "a little late."

"Late? Why? You can put up your idealizator again. You'd do that much, wouldn't you?"

"Van Manderpootz," he observed, "is the very soul of generosity. I'd do it gladly but it's still a little late, Dixon. You see, she married the bright young psychiatrist this noon."

Well, I've a date with Tips Alva tonight, and I'm going to be late for it, just as late as I please. And then I'm going to do nothing but stare at her lips all evening.

Castoffs in the Trackless Universe, a Man and a Girl Build a Fantastic Life Together in—

THE EXILE OF THE SKIES

The Saga of Knute Savary, Greatest Scientist of Earth's History, Who is Sentenced to Space by a World Whose Doom He Alone Sees and Can Avert!

By RICHARD VAUGHAN

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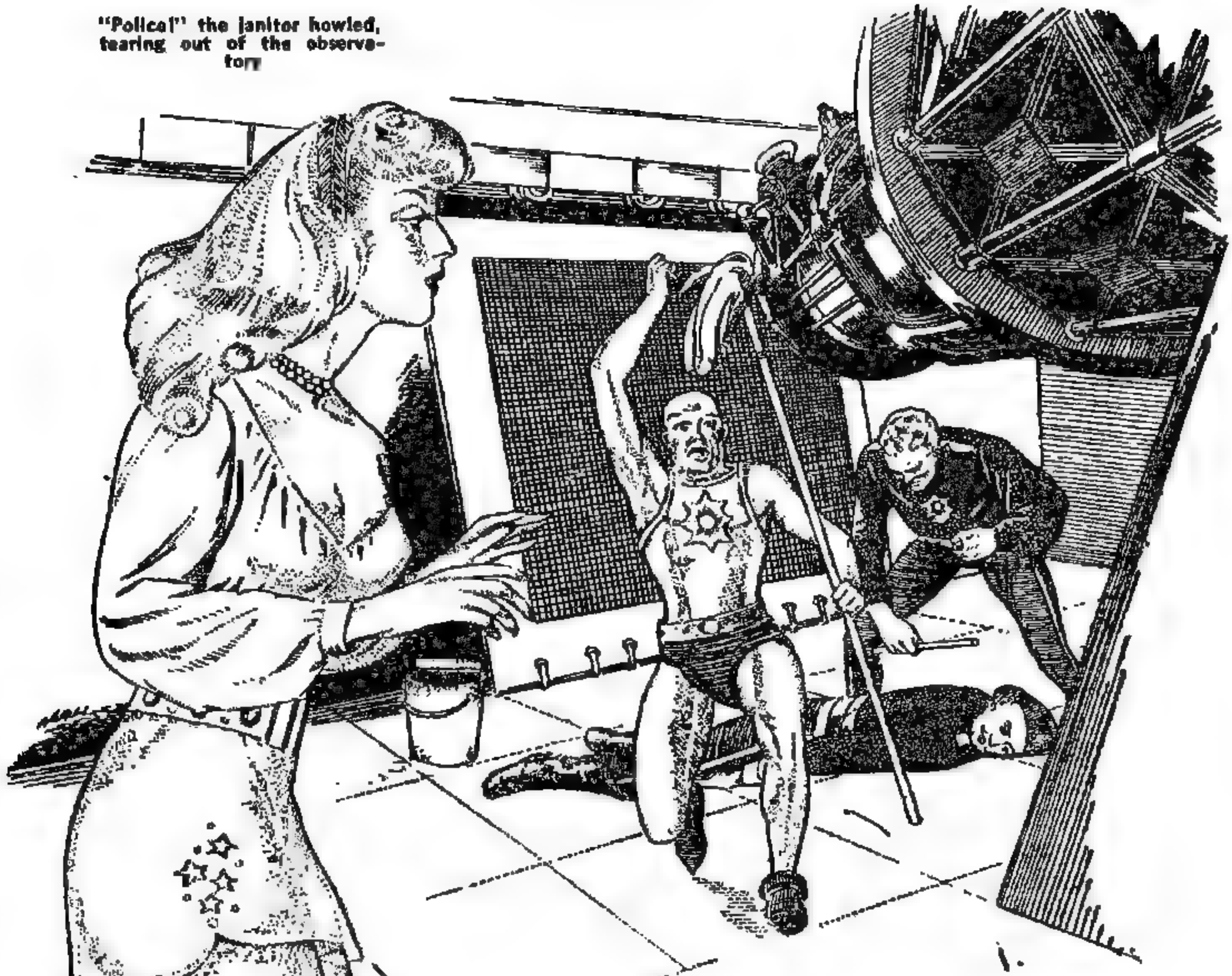
NEXT ISSUE'S FEATURED NOVEL!



Death at the Observatory

By JOHN RUSSELL FEARN

Detective-scientist Scott Marlo probes an astronomer's odd fate!

JACKSON, janitor of the new Richmond Observatory, heard it first—a hoarse scream from down the passage leading to the main astronomical observatory. A scream, and then a babbling stream of words in which he recognized the voice of Dr. James Crayson, chief of the astronomical staff. Then silence.

Jackson blinked, then dropped his mop with a wet thud on the linoleum and raced up the corridor at top speed, bursting in through the great green baize doors at the end.

An astounding sight met his eyes.

Dr. Crayson lay huddled on the floor, sprawled below the platform of the mighty new 400-inch reflector. Standing over him, a slender bright bar in his hand, was young

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Charles Bradmore, Crayson's assistant.

"Mr. Bradmore, sir, what's happened?"

As he gasped out the words Jackson slowly went forward, his eyes wide, fixed in horror on the motionless figure of the astronomer. With a sudden start he noticed the smear of blood from the doctor's dark head.

"You—you killed him!" he shouted suddenly. "Mr. Bradmore!"

"Oh, shut up!" Bradmore snapped. His young face was white, his fair hair disheveled. "Don't jump to such idiotic conclusions, man! Dr. Crayson fell from the platform, struck his head on this bar and it snapped off. He—" He broke off. "Where are you going?" he demanded, as Jackson swung around.

"Police!" the janitor howled, tearing out of the observatory. "Police! Help! There's been a murder!"

His shouts brought other technicians from their night work in the great building. They crowded into the observatory, each adding his own opinion, each infuriating the haggard Bradmore all the more.

"You and Crayson never were on friendly terms, were you?" asked Dalroyd, the chief spectrographist in his cold, cynical voice. "This looks pretty ugly for you, Bradmore."

"Oh, shut up, all of you!" Bradmore blazed, his blue eyes flaming. "I tell you he fell!"

"Nonetheless," said Dalroyd steadily, "this is a matter for the police." He strode through the assembly to the telephone.

The confused Bradmore hardly remembered what happened after that. He recollected the doctor saying that Crayson had died from a violent blow on the temple. He remembered, too, that he was asked a barrage of questions when the police arrived. Then, with relentless inevitability, the law took its course.

Bradmore, totally confused by the speed with which matters moved, had only a weak defense, and certainly no alibi. Circumstantial evidence piled up against him.

THE observatory staff was bound to testify that it was well known Bradmore had little love for his superior, Crayson. Their work had always been done in a certain atmosphere of tension. Bradmore knew full well that Crayson's job would have been his, except for influence in the background. Wordy arguments between them had ensued many a time. And on this particular night they had quarreled again . . .

The prosecuting counsel was certain of Bradmore's guilt. In a fit of anger Bradmore had smashed off the slender guide bar of the great telescope and dealt the astronomer a mortal, cowardly blow.

The only fingerprints on the bar were those of Bradmore. Crayson had not even touched it that evening. In vain Bradmore protested that Crayson had had no need to touch it—that he had picked it up when Crayson had smashed it off in his fall.

All too flimsy. The jury was only away twelve minutes and returned with the verdict of "Guilty!"

The newspapers carried the story under the headline of "Observatory Mystery." But not a soul in the land, save one, believed that Bradmore was innocent. That one was his closest friend, Dick Warland.

Warland heard the whole case through, was even a witness to his friend's unimpeachable character. The jury's verdict was a blow to him.

Then gradually out of the maze of Warland's despair there came the slow beginnings of an idea. . . .

He reached for his hat and left his modest apartments in Golden Green at something closely approaching a run, on his way to see the one man who could help him—Scott Marlo, who had an enviable reputation for solving mysteries through scientific deductions.

Many in the scientific world said that Scott Marlo was crazy when he had forsaken an undoubtedly brilliant scientific career for the further pursuance of his hobby, criminology. Few credited his assertion that there was more scientific discovery in the unearthing of modern crime than there was in straight laboratory science.

The modern criminal, he averred, used scientific methods. He, Marlo, had set himself up against this vicious element, with remarkable success so far, even if Scotland Yard was at times prone to regard him as something of a dabbler.

His apartments over an Oxford Street store were large and well furnished, and carried a peculiar reek of chemicals. To the rear he had a complicated laboratory. Most of his time was spent in intricate analysis,

using his masterful scientific mind for the extension of known theories into quite new channels, usually to the undoing of some criminal.

On the evening of Bradmore's conviction, Dick Warland was shown into the presence of this thirty-five-year-old scientist. The manservant left him alone in a quiet room in which the London traffic roar was muted, then Marlo appeared in a white smock.

Short, big-headed, square-jawed, with closely cropped black hair, he was unquestionably a man of action and swift decisions. As the scientist shook hands with him, Warland had a curious impression of rocklike strength and imperturbability, founded on definite knowledge.

Marlo's keen gray eyes were asking questions all the time Warland stated his business.

"The Bradmore case?" Marlo repeated at last, after pondering a moment. "Oh, yes. I have the facts tabulated. Very interesting, too. It was especially interesting to me as a scientific matter—astronomical, I mean. But why do you come to me?"

"Because I believe Bradmore is no more guilty than you or I—and I want you to prove it." Warland smiled a little apologetically. "Unfortunately, I'm not a moneyed man. I can only pay modestly for your services. I've come to you because you are the last hope. I believe something happened in that observatory of which nobody—not even Bradmore—had any knowledge. I believe that whatever it was accounted for Crayson's death."

Marlo stroked his square chin with acid-stained fingers. "Well, maybe," he admitted finally. "But that hardly justifies my entering the case. I'm not a professional criminologist, only an amateur."

"But you're a scientist!" Warland said earnestly. "This needs a man of science, not a detective. Nothing but a scientific cause could have killed Crayson. I'm convinced of it."

"*Ummm,*" Marlo grunted, and pondered again. Then he started to walk round the room, thumping his fist in his palm. "You know," he said slowly, "the more you recall the facts of the trial to my mind, the more I begin to see your viewpoint. I thought at the time that there seemed to be certain weaknesses. A four-hundred-inch telescope, for instance, only newly installed—the greatest telescope ever made. Come to think of it it might be worthwhile looking into the case if only to get a close look at that monster."

WARLAND was delighted by the result of his visit. He grinned with delight.

"Whatever your reason," urged Warland, "I beg of you to look into it. But again, in all fairness, I must remind you I have but little money."

"Money?" Marlo laughed shortly. "What is it, anyway? Paper currency, formerly based on Element Seventy-nine—gold. I've no time for money Got loads of it." Again he hesitated, then his big dark head nodded slowly "Very well, I will look into it," he promised quietly "But first of all there are one or two details I must arrange. My friend, Detective-inspector Hartley of Scotland Yard arranges official details for me which allows me a permit as a free operator In the meantime I shall study the situation."

"And what must I do?" Warland asked.

"You? Nothing at all. Be at the Richmond Observatory, main entrance tomorrow night at eight. It will be dark then, and maybe that four-hundred-inch reflector will tell us something."

Warland snatched his hat. "Okay! Count on me! And thanks again and again. I'm going to get into touch with Bradmore and tell him all about it. Good night."

Marlo didn't answer. He was already lost in thought, stabbing the air with his long index finger to emphasize certain points in his mind.

Scott Marlo kept his word. Warland, waiting on the observatory steps an hour before time, became aware of the scientist's stocky, powerful form striding through the misty darkness on the stroke of eight. Marlo merely gave the briefest of nods, then strode purposefully into the main corridor, handed in his card, and moved on to the great, lighted observatory.

Warland found himself introduced to the bluff, plain-clothed figure of Inspector Hartley, and then to the technicians who had been summoned to attend.

"I don't know what I'd do without you, Hartley, to get things into shape," Marlo commented, taking off his shaggy overcoat.

He rubbed and flexed his hands like a

pianist about to play a concerto, then turned toward the mighty mass of the 400-inch reflector, stared thoughtfully on to the mirror screen immediately below it. Most of it was covered with eiderdown. After a moment or two he mounted to the eight-feet-high platform from which Crayson had fallen, and sat down before the guiding eye-piece of the giant.

"Tell me," he said, turning slowly, "what exactly was Dr. Crayson studying on the night he met his death? If any of you here know, please be absolutely exact."

"I can tell you," answered Dalroyd, coming forward. "He was making an analysis of Sirius. There was some slight alteration in the star's magnitude and he was preparing to make a complete report. I know that because I was standing by ready to make spectroheliograph observations."

"Sirius, eh?" Marlo's eyes narrowed. "Sirius—the brightest star in the sky. How do you fix this telescope on any star? Eyepieces, or what?"

"Usually it is done by mathematical prearrangement, a science of angles. Only way to shift a giant like this. Then there is a preliminary survey through pilot telescope for centering."

"I see. Well, I'd be glad if you'd fix it on Sirius, now."

Dalroyd nodded, motioned to two other technicians beside him. They went to work together on the operation of massive controls and switchboards. The mammoth contrivance moved slowly in its great gimbals, was adjusted to a hair fineness of focus, and finally was trained onto the mirroid reflector from which the eiderdown was removed.

Marlo, Warland and Hartley stood with the others, staring down into the mirror. Sirius was dazzlingly reproduced, the mininess of the upper atmosphere creating little disturbance. For a long time Marlo stood frowning and making notes.

"Well, nothing unusual there," he muttered. "Except for the star's savage brightness, which may have something to do with the matter."

He debated again then, apparently struck by a sudden thought, climbed the trellis work of the reflector and examined it closely.

"And nothing there either," he said, descending again. "It had occurred to me that some device, actuated by light waves from Sirius on a selenium cell might have been attached to this reflector—some kind of apparatus designed to give Crayson a mortal blow, afterward to be cleared by the guilty party. But there's no sign of anything."

"What did you expect—a sledge-hammer?" asked Dalroyd coldly.

Marlo ignored the sarcasm, stood musing.

"Don't you think you're all wrong this time, Marlo?" Hartley asked patiently. "After all, all this is quite unorthodox, with the case closed."

"If we find definite evidence to prove Bradmore's innocence it doesn't matter a lot if the case is closed or not," Marlo retorted. "Keep quiet a minute."

OBLIVIOUS of everybody he started to walk round slowly, jabbing his finger in the air.

"Sirius, three weeks ago," he muttered. "Spin of the earth . . . distance covered—Hummm!" He stood staring in front of him, then suddenly he swung round and snatched his hat and coat. "That's all for now," he said shortly. "Thanks for your help. Good night!"

"Say, wait a minute!" Warland cried, racing after him as he made for the door. "What line are you working on? Can't you give me some idea?"

Marlo shrugged. "Don't know myself yet. Maybe hit or miss. Have to work it out in my laboratory."

"Can't I come with you?"

"Nothing stopping you, is there? Come on."

It was close on eleven by the time they got back to Oxford Street, and once within his rooms Marlo began to reveal something of the real dynamic energy in his make-up. Without even a suggestion of refreshment or idea of sleep he sat down at his desk, switched on the light directly over it and started to figure rapidly on a thick note pad.

Warland could only lounge in a chair and watch, totally in the dark as to what was going on. Here and there Marlo gave a few hints, but they were vague.

"On the night Crayson died there was something different about Sirius to what we saw tonight," he said at last, after nearly two hours of note-making. "I'm satisfied as to that. What I have to do is to work out the distance Earth has traveled since Crayson

studied Sirius. According to my calculations the position now is that we would have to look at the star Zaurac in order to look through the same portion of space that Crayson looked through. You understand?"

"Yes." Warland nodded. "But what does it prove?"

"I don't know—yet."

Marlo debated a moment, then got to his feet and led the way into the adjoining laboratory. Pressing a button in the wall he sent a portion of the room sliding aside, maneuvered a small but powerful telescope into position. He only stared into the eyepiece for a moment or two, then visibly winced. It was clearly a supreme effort to tear his gaze away.

Warland stared at him in astonishment. The scientist had dropped into a chair, his face drawn and white, his hands trembling.

"Heavens!" he whispered. "Good Heavens!"

"But what did you see?" Warland cried, then strode to the instrument and seized it.

To his surprise Marlo sprang up and whirled him back, thumbed the switch that sent the roof portion back into place.

"Don't look!" he breathed, fighting for calm. "Don't look!" He took a deep breath, then said slowly, "You can take it from me, Warland, that the innocence of Bradmore can be definitely established. Now I know what killed Crayson!"

"What?" Warland demanded.

"You'll know the instant I have gathered together officials from the right quarter. You be at Richmond Observatory again, two nights from now." Marlo held out his hand. "Good night, Warland. See you Thursday at eight o'clock."

Warland took the dismissal quietly, went out into the quiet street, his hopes buoyed, though he did wonder what Marlo had seen.

It was clear that in the two-day interval Marlo had pulled several influential strings, for when Warland arrived in the observatory he found not only the scientist himself and Inspector Hartley, but—among other experts—Judge Milbank, who had sat in the Bradmore case.

After introductions, Marlo moved to the platform of the giant telescope, stood surveying his audience and gripped the hand rail in front of him.

"Gentlemen, I intend to put before you tonight certain facts, together with a demonstration, to prove indubitably that Charles Bradmore did not kill Dr. James Crayson. Let us begin at the beginning.

"In the first place, Bradmore was found with a metal bar in his hand. Evidence at the trial showed it had his fingerprints upon it. Evidence also proved that the bar was one of the many small guider rods of this gigantic reflection which could be easily smashed off by a heavy blow. Crayson's fingerprints were not on it because on the night in question he had had no reason to handle it.

"Bradmore, as assistant astronomer, set the telescope to the desired spot by instruments. That desired spot was the star Sirius. Also, Bradmore handled the bar afterward. That accounts for his fingerprints. In the interval the telescope moved by its own machinery, of course, to keep pace with the Earth's movement through space and regular rotation upon its axis.

"I submit, gentlemen, that Bradmore's statement was true in every detail. Dr. Crayson did fall from his platform, and in so doing struck his head on the bar. The bar snapped off. Bradmore picked it up, quite a natural thing to do in the circumstances—and was thus found by the janitor. Bradmore's personal dislike of Crayson, other facts of his private life, finally led to a conviction."

THE audience remained silent. Some of them were looking doubtful.

"Crayson died because of what he saw through this telescope," Marlo resumed in a steady voice. "Let me show you, gentlemen—and I warn you to keep control over yourselves."

He glanced at his notes then turned to Dalroyd. "Fix this telescope on the star Mira," he ordered quietly. "And do it without any direct observations. I have my reasons."

Dalroyd and his two assistants nodded and set to work. It took them seven minutes to fix the position by the precision instruments. Marlo finally nodded, gave a signal, and the lights were lowered.

The group sat motionless, watching the mammoth reflector. Marlo fingered the main switches carefully and the mirror came slowly into life.

But it was not the pulsing, variable sight of Mira upon which the men gazed. Instead

they found themselves held rigidly transfixed by a blaze of hideous, interwoven colors—blinding radiances of all hues.

The colors themselves were awful enough, but the effect they produced was even worse. They exerted a fascinating mesmerism, forced the mind from its ordinary channels into one of frozen panic, then into a growing sense of unbelievable terror. The effect heightened. An unbearable tension began to gather.

"Stop it!" screamed Dalroyd suddenly. "Stop! In Heaven's name, stop!"

With an effort, Marlo switched off. The lights came up. It was several minutes before any of the party recovered, and even then they were white-faced and shaken.

"Gentlemen," Marlo breathed at last, "you saw that vision over the wide area of the mirror. For that reason its effect was not nearly so potent as on the night Crayson saw it through an eyepiece. He got the concentrated force of it, and the star he was looking at was the strongest star in the whole sky—Sirius. Infinitely brighter than the one we viewed tonight, or the one I viewed myself."

"But what does it mean," demanded Dalroyd, mopping his brow. "What's wrong with the star? Or is it the reflector itself?"

"Neither. The trouble is in space." Marlo hesitated, as though marshaling his facts, then proceeded: "Space, so far as we can ascertain, is the carrier of electrons, which in themselves carry radiations of varied types. Space, for want of a better name, we term ether—though no scientist really knows what he means by this. The word 'medium' is more appropriate. Now, as a small example. When electrons change position in, say, the Sun, they give forth energy in the course of their displacement.

"That energy travels through space, displaces electrons in our eyes and gives rise to the sensation of sight. We say: 'I see the Sun's light.' Naturally, this electronic change is responsible for everything we see. Normally, there is nothing in space to prevent electronic change producing its customary effect of light. But a spatial warp, the slightest blending of these light waves from the normal wave length which produces white light, can instead split it up into prismatic colors by alterations of wave length. It can do more.

"A human eye, turned to accept certain colors and wave lengths, is utterly at variance when suddenly faced with a series of vibrations it has never known. What happens? The brain revolts against these new sensations in its effort to master them, even as the body itself revolts, and dies, in the effort to assimilate poison instead of normal food. What happened then, was this: Out in space there is a warp, a slight bending or pucker in the etheric medium which, in one quarter of space, has changed visible light into a combination of colors destructive to the brain if received in full force.

"How that warp came about we cannot know. It may be the outcome of interwoven vibratory forces of which we know less than nothing—but we do know that the unfortunate Crayson viewed Sirius when that space warp was right between him and the star. With such a telescope as this he got the full blast of unfamiliar wave lengths. He went instantly insane. He fell, screaming, smashed his head against the telescope bar and—well, that was what killed Crayson.

"And my own conclusions. The details showed me that only a space warp could be possible. Astronomy is one of my many lines of thought and, as I worked, I remembered that somewhere I had read a treatise on space warps and their manifestations, together with the suggestion that the extraordinary variability of some of the fixed stars might be accounted for by such warps.

"The basis of a warp could clearly, magnified by a reflector like this, cause instant death. I began to see what had happened. But how to prove it? Presumably the warp was stationary, forming in one spot and dissolving in that spot as fresh radiations took its place. I learned what star Crayson had studied on the night of his death. From that I had to work out, by mathematics, the speed of the Earth's journey through space and the relative change in positions compared to the cosmos, and so finally arrived at the approximate point in the sky where the space warp ought still to be on view."

MARLO paused a moment for breath, his eyes fixed upon his listeners.

"I found it. I studied Zaurac, a comparatively weak star, through a likewise weak telescope, but even at that I experienced considerable mental turmoil. Young Warland here will verify that. The rest was more

mathematics—the sorting out of where the warp would be tonight; namely, in front of Mira. You saw what happened. Also in the meantime I advised other astronomers through the courtesy of the Astronomer Royal, to refrain from viewing the heavens on specialized points until we had had a consultation.

"Any of them might have met the same fate as Crayson, but Providence stayed their hand in looking through that warped space. In time, the warp will dissolve. Until then, precautions must be taken. In space, then, gentlemen, is the real culprit, entirely beyond our jurisdiction. As for me, I will stand witness at a reopening of the trial, and I have the support of the Astronomer Royal, and you gentlemen here tonight."

A silence fell on the group as Marlo stopped talking. Then at length he walked down from the platform and Judge Milbank rose to his feet.

"There's not the slightest doubt, Marlo, that you have accomplished a scientific deduction of phenomenal brilliance," he said quietly. "What's more, you proved it. I have little doubt as to the outcome."

He bowed gravely to the others and walked out. Warland swung around and gripped Marlo's hand eagerly.

"I can't begin to thank you!" he choked. "Now please let me have your bill."

"Bill?" Marlo frowned. "Oh, that! Be hanged to it. No use for money. Got too much of it." He stood regarding Warland thoughtfully. "Just the same," he added slowly, "I could do with somebody like you to help me now and again. My activities may extend after the publicity from this case. What about it?"

"You mean it?" Warland cried in joyful amazement.

But Marlo was already at the door getting into his hat and coat.

" 'Course I mean it!" he snapped. "What are we waiting for? Come on, man!"

William Wilson, the descendant of famed Boston surgeons, was a total failure as a doctor until enticing Priscilla arose from the ancient dust

IN

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A nicely shaped body of five foot eight or nine was the most highly desired thing on earth

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CHAPTER I

Strange Proposal

IT IS no use raising false hopes," said the specialist, "you have acromegaly."

Augustus Loted heard this sentence of slow death without any sign of emotion. He had expected it.

"And there is nothing that can be done for me?" he asked dully as he rose from his chair and walked to the window.

"In the present stage of our knowledge, not much. But research is being carried on. Every week there is hope of an illuminating discovery. Your condition will take years to run its course."

The millionaire seemed not to hear. Wearily he leaned against the frame of the window, apathetically gazing across the public park that his house overlooked. The most noticeable thing about that twenty-third century park, apart from the exotic plants and trees produced by centuries of selective cultivation, was the remarkable lack of proportion among the people in it.

Men and women were to be observed with heads three or four times as big as they should be, others had hands or feet half as large as their chest, while many, though well-proportioned, were giants seven or eight feet in height. In the past nearly

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Men and women were to be observed with heads three or four times as big as they should be, others had hands or feet half as large as their chest, while many, though well-proportioned, were giants seven or eight feet in height. In the past nearly

all men had secretly longed to grow, to become as big as possible, but now people grew too much.

They grew in ways they did not want to grow, and they could not stop growing. A nicely shaped body of about five foot eight or nine was now the most highly desired thing on earth. It was a possession few people could boast of.

The cause of the trouble lay in a little body called the pituitary gland, found at the base of the brain in the center of the skull. It has two lobes, the posterior and the anterior. The anterior lobe controls the growth of the body. When it was insufficiently active science could remedy the deficiency—but when it was overactive, either making giants of children or causing adults to develop in unusual ways, there was no known way of correcting the trouble.

Gigantism and acromegaly both resulted in loss of physical and mental activity and of sexual power. Through long ages of effort mankind had nearly succeeded in its war against the disease-producing bacteria and their allies, the vastly smaller viruses, only to find this rare and curious condition developing into a menace that threatened to destroy civilization.

"It is the penalty we pay for proliferation," said the physician, joining him at the window. "When the laboratory production of food sent the population soaring, something was lost. We produce the known vitamins by intensive methods but there must be some at present unknown vitamin which is essential to the pituitary gland.

"Our present knowledge is insufficient to support a population so huge that, in spite of the efforts of governments, numbers have steadily dwindled until they are less than half the peak figure. This decline, due less to actual deaths than to the loss of sexual power, will go on until either the remaining people are forced back to more natural lives, or we learn to correct this condition.

"It was the legacy of Crowther, the millionaire cancer victim, to the cause of cancer research, that led to the control over that one-time scourge. You, if you could be induced to take an interest, might give an enormous impulse to investigation of the trouble you are suffering from." He stopped, suddenly doubting if Loted were listening.

"You don't believe," drawled the sufferer, "like some writers, that mankind will be destroyed by it?"

"No," the physician said briskly. "The balance of nature will reassert itself."

"Perhaps without a place in the scheme for mankind," Loted said. "What if the main sources of your unknown vitamin are extinct? Many species of plants and animals have gone out of existence in the last hundred years or so and many more have come into being."

AFTER the catastrophic crash of the Parker group of companies, which pauperized many thousands of well-to-do families, Augustus Loted stood out, clear and unchallenged, as the greatest financier of the day. Indeed, none knew the full extent of his powers, for his operations extended secret ramifications into every phase of economic life.

People still fondly believed that they were governed democratically but the truth was that Loted dictated to every government in the world. He had many ways of breaking obdurate politicians, whether they belonged to that bulwark of wealth and privilege, the Communist Party, or were the wildest revolutionaries.

The fact that the "curse of the age" had the temerity to attack this powerful man was naturally seized upon by news agencies and proclaimed throughout the world. The multi-millionaire had given two million dollars to the cause of research, further offered a reward of half a million for any person discovering a cure.

A flood of letters and personal calls followed from persons who needed only a little financial backing to enable them to accomplish this. There was a man who believed that he could do it by means of drugs to be obtained from the hardy vegetation that grows in the deepest crevasses of the moon. Another had discovered a spring of curative water in the center of the Sahara Desert, exact location unknown.

Another wanted a hundred thousand dollars with which to build a machine to produce rays to do the trick. One man wanted to breed a certain kind of tropical insect whose bite he thought efficacious. By no means the least wild were schemes for obtaining the necessary information from the planet Venus.

A few words concerning the development of terrestrial correspondence with Venus would not be out of place here. In 2028 were received the first messages known to have originated on Venus, but many years passed before intelligent communication was achieved and the formula for that frightful explosive, Venusite, transmitted.

Venusite is one of the more complicated carbon compounds. It derives its violent powers from the peculiarly unstable arrangement of the atoms in its molecules. With Venusite, it was believed that ships could travel not only to the moon but actually from one planet to the other.

It was tried. A ship of brave men ventured out beyond the power of telescopic range, beyond the range of their feeble transmitting apparatus, out the ken of their kind forever. Another followed, and another, and another, and yet another, before a halt was called to this waste of human life.

About a hundred years after the departure of the first vessel men began to become alarmed about the growing twin menaces of gigantism and acromegaly and somebody conceived the idea of asking Venus what it knew about them. This rather absurd step met at first with encouraging success, for the Venusians declared that they knew all about vitamins, which it seemed were fundamental factors of life and constant throughout the universe. They knew what vitamin it was that we lacked, had it in abundance, but could not tell us how to produce it. Spurred on by the hope of bringing life-giving knowledge back to Earth, many more brave men were swallowed up by the void.

Loted had all suggestions transferred to paper and employed a staff of scientists to report on their feasibility.

One or two of them contained discoveries that the writers had spent a lifetime of toil in achieving.

These he stole in order to augment his own fortune.

"Success is not built upon scruples," he told a scientist who objected, well knowing that he could hound the man to suicide if he spoke about it. Perhaps the most persistent of these would-be benefactors of humanity was Martin Harley, but as he refused to give details of his proposals, demanding a private interview to explain them, he was ignored.

IT WAS about 2:30 one morning when Loted was awakened by the warning bell under his pillow. Somebody was climbing through the window. Instantly the automatic precautions began to operate. Though he secretly controlled a considerable force of gunmen there were many men he had ruined who might take a desperate chance for revenge.

Out of sight of the bed, the recess with its window was lit with invisible infra-red rays, throwing on the screen before him a clear picture of a young man, roughly dressed and thin to a point of semi-starvation, with one leg over the sill.

With a smile of grim satisfaction, the financier fingered the switch that would send the intruder into eternity. But catching sight of the man's eyes, in which glowed the fire of genius or insanity, he held his hand. This was not an ordinary thief or murderer.

The instant the man was inside steel bars snapped across the window, trapping him. Startled, he looked wildly round, flashing his torch.

"I see you though you don't see me," came Loted's voice in the darkness. "Drop that torch and walk two paces forward, then twelve to the right. Disobey me and you will not live a second."

The intruder obeyed.

"You must be a brave man," observed Loted, musingly, still watching in his screen. "You seem to have iron muscles and a light frame but still your climb to the window must have been a ten-to-one gamble with death."

"I had to see you," said the man, gaining confidence, "and as you refused to interview me I chose this way. I am Martin Harley."

"Your identity I guessed. Tell me what you want but I warn you to be brief or I shall end the interview in abrupt fashion."

Nervously the intruder licked his lips. "To a poor man like myself, invisible Croesus, life is not so pleasant that I should greatly regret losing it."

Imperceptibly the financier's eyes hardened. Another word and he would know that this was merely another victim of his, seeking revenge. There were graves for such.

"My fortune," the man went on, "was dissipated, not as a result of your actions but in an endeavor to help humanity, in perfect-

ing the project I am about to put before you. I now know that only with the assistance of wealth can I hope to put it into operation. I need ten thousand dollars to finance a trip to Venus in a ship of my own design."

Harsh and abrupt the financier's laugh sounded.

This was so simple, so crude!

"You will need something more subtle than that to get money out of me."

"I am hardly in a position to put my case in the best light, but being well aware of the monotonous tale of total disappearance that has ended every previous attempt to reach Venus, I have come to the conclusion that in every case the same mistake was made, namely that the project was known to Venus."

"You certainly are original there," admitted Loted. "You suggest the Venusians themselves destroyed these vessels. But they should they be hostile towards us?"

"Why should they not? They say that they have the cure for your trouble, for the world's trouble, but cannot transmit the knowledge. Frankly, I do not believe it, and I have built my ship to test my idea. It will carry two persons only and is designed to reach Venus secretly. What will happen when we get there I do not know, for the journey one way will absorb nearly all the Venusite, leaving us unable to get back without a fresh supply."

Loted clicked his teeth and smiled broadly. This talk amused him. More than that, it secretly excited him.

"On the strength of that you expect ten thousand dollars? You know, young fellow, there is a golden rule for success in life. It is this—'Never trust anybody and treat every proposition put before you as fraudulent, every person you meet as a swindler.' Every time I have departed from that simple rule I have been stung."

"I can prove my honesty," cried the man, "I will show you the ship I have built, or if you fear a trap, an agent of yours."

"While we have been talking," said Loted, "I have been thinking. And I have made a decision."

"To throw me out or shoot me?" the man said, smiling wryly.

"No. To help you fit up your vessel and to travel in it to Venus as your passenger."

CHAPTER II

The Evening Star

AIRPLANES transported the costly Venusite, the air-producing apparatus and the stores to the hiding place in the Rocky Mountains. Then, one dark night, the little bullet-shaped vessel slid gracefully out of the atmosphere, off into space.

The oddly assorted pair inside enjoyed each other's company more than they had expected. They developed a habit of playing games together and of conversing in a cabin where the indicators were, where Harley could glance from time to time to assure himself that all was well. Haffey was the first to endanger this peaceful progress by embarking on controversial topics.

"It seems strange to me, Mr. Loted," Harley said, "that you should give up all your comforts and luxuries for the discomforts and dangers of this voyage."

Loted altered his position in the comfortable arm chair that he had had installed for his own use and knocked the ashes from one of his special cigars.

"Perhaps it is not so surprising as you think. You see, I was about at the end of my tether, and would soon have had to give up those luxuries. For some time, things have not been going quite so well with me as I have pretended and some of my little forgeries and other tricks must be found out soon. The crash is not far off.

"Actually, I am insolvent to the extent of about fifty million dollars, to say nothing about a lot of people who think they're rich and who will have a shock when they find they're not. So you see it was expedient for me to get away for awhile. Now I have another home, a nice quiet little place in the Holiday Islands, in England, near the ruins of ancient Southampton.

"There I shall be simply John William Barto, a man of ample but not excessive means. My family is already there, the money is there—money that, I need hardly say, should really go to my creditors. But Barto himself is not there, nor has he been seen. How to get him there puzzled me.

"But when you proposed your secret space-trip, it sort of cleared matters up. A little way out into space, staying away long enough to alter my appearance completely with the aid of a portable plastic surgery oufit, an unobtrusive landing in a wild part of an English forest among the bears and lions. Well there you are— The few years of comparative health I have left spent in sport and hunting.

"Oh, I'm not afraid of your betraying me, for I shall still be able to pull a few strings. Breathe a word of my hiding-place and the police of any country will throw you in jail on some invented charge if one of my gunmen doesn't get you first. If you keep quiet I will pay you a reasonable amount for your services."

"I know nothing," admitted Harley quietly, "about high finance. Such matters do not interest me. But I venture to remind you that when you entered this vessel, you started on a mission. That mission will be carried out. You may settle in England some day but at present you are coming with me to Venus."

Loted rose from his chair, his big frame seeming about to fall upon and crush the slight figure before him. In spite of the towering bulk of the one and the dried-up quality of the other, they looked at the moment strangely alike, two men of fixed resolve and inflexible wills.

"Fool," said Loted, "do you think that I had not foreseen your resistance, that I am not prepared for it? See this Venusite gun? With it I could blow you out of existence, then pilot the ship back at my convenience. Yes, I have had instructions in landing space-ships. If you wish to live, stand up and walk into that room where you will be locked up until I choose to let you out. Stand up!"

But Harley sat quite still, quite undisturbed.

"Your description of me may be correct," he said coolly, "but I have never quite trusted you and was prepared for some such move as this. Kill me if you wish. My death will come quicker than yours, for you will wander about in space until you die of starvation or thirst. I have so mixed up the indicators and controls that only I can understand them.

"You know that the solar system is flat, all the planets on one plane? Well, I have deliberately wandered off that plane and unless I remain in charge we shall spend years in the void. Waste time and our supplies will not last to Venus."

Loted had often been called a man of iron but iron is cut by steel. Harley got his way.

* * * * *

The landscape of a strange planet! In the sky is a sun of the wrong size and either red or blue according to the density and extent of the air. Perhaps, as on Jupiter, the air is full of flying things without wings. Perhaps, as on Mars, the very shrubs make noises, weird and shrilling. Perhaps, as on Ganymede, protective mimicry has been developed to such an extent that one never knows when any plant or stone may suddenly spring away upon one's approach.

To Loted and Harley, as they stood knee-deep in the yellow moss that carpeted the low hill on the side of which they had landed, there were other factors to fill their breasts with unusual emotion. The bright eyes of the fanatical Harley glittered with subdued triumph while Loted looked like a punctured balloon under the unaccustomed experience of being beaten.

Almost entirely without incident, the journey seemed to bear out Harley's contention that secrecy was the first essential for a successful journey to Venus. They were on a probably hostile planet, on a perfectly hopeless mission.

"Wish I'd shot you the moment I set eyes upon you," growled Loted. "It's my opinion, sir, that you are a lunatic, a monomaniac."

AS HE HAD expected, Harley took no more notice of him than one does of the yapping of a stray dog. He was a man of one idea and it is doubtful if he heard the other's ravings. He stood contemplatively gazing at the only animals of any size in sight, three beasts with round green bodies and four legs, one straight and tapering while the others were curved almost in a semi-circle. After a while he realized that the short leg was a sort of beak or tube with which they were poking about in the moss, probably feeding.

Abruptly Loted turned and walked away.

But Harley had not completely forgotten him.

"Where are you going?" he asked.

"I'm fed up with you," burst out the other. "I'm going to broadcast a message to the ruling beings on this planet, saying who we are and throw ourselves at their mercy. It's the only way."

"You can try, if you like. I've already made the apparatus inoperative."

Did the man think of everything? Loted had a queer feeling that in the energy and resource of the other lay his only hope of ever getting away from this horrible place.

"I think," observed Harley, moving at last, "that it would be well to do a little judicious exploring. We need more food and those green things may be good to eat. We had better take dark glasses to shield our eyes from this glaring light, hand guns with solid bullets for game—and others with explosive missiles in case of danger.

"Although I understand that there are no harmful beasts or plants here I like to be prepared. Also since the air here is so poor in oxygen it would be wise to carry small tanks of oxygen on our backs for emergencies. Care to come?"

Loted growled his assent.

Cautiously avoiding the top of the hill, which would show them up in silhouette against the clouds, they walked around the side until they were in view of the extensive panorama beyond. It was one of the most barren, ill-favored spots of Venus, for vegetation was scarce, most of the ground being bare and rocky.

Wherever it could obtain a hold the feathery yellow moss grew and sinister looking red blobs proved to be clumps of trees. Away to the right a blue sea broke in a line of foam on a sandy beach, a long arm of water running from it, coiled round like a figure six. Round this inlet was an expanse of marsh covered with rank vegetation showing the gold, red, and brown colors of woods in autumn.

Birds with leathery wings and huge beaks crammed with teeth flew above, shrieking harsh cries. At first glance, the whole valley seemed void of the usual evidences of intelligent creatures, buildings, roads, machinery, and visible cultivation.

Loted saw them first. "Mushrooms," he grunted.

Indeed they looked much like mushrooms—hemispherical white objects on stalks a hundred feet high.

Walking on down the slope the two passed through one of the red jungles and noted the trees gave forth a sweet sickly scent. Beyond it, they came upon a number of the green beasts browsing among the tall moss. Harley fired at one of the nearest. The sharp report sounded like a brutal assault on the silence of the semi-wilderness.

The stricken creature gave several agonized leaps into the air, then fell and lay still. Forthwith, the others bolted in long jumps, bending their jointless legs as a snake bends its body, except for the two companions of the fallen one, who stayed and felt the body with their yellow beaks. Seeing the two men, they leaped together.

Realizing that he was being charged, Loted fired at the hurling green body, then side-stepped hastily. It turned in mid-air and fell on him, knocking the breath out of him. He wriggled from under the corpse and got up to see that Harley had accounted for the third.

With Harley carrying one of the bodies, they began to retrace their steps. But the heat, the moisture-laden air and the lack of oxygen were beginning to tell upon them. Panting and grunting, they were glad to sit down and rest in the shade of the red jungle whose smooth branching stems rose, without leaf, bud or flower, thirty feet above them.

Harley yawned heavily. The sweet musky smell made him very sleepy.

"Quite safe," he muttered, "rest here. Have it on 'thority Venusians themselves, nothing harmful on Venus."

Loted wanted to remind him that what was innocuous to the natives of Venus might be harmful to strangers from Earth but the thought was too complicated to put into words. He sank into happy slumber.

How long Harley slept he never knew but presently he became aware of someone shouting. Something had gripped him tightly by one leg but he took no notice. The shouting persisted.

"Wake up, Harley! Save me!" Why couldn't the fellow leave him in peace?

"Sit up, Harley, sit up and take a breath of oxygen, or we are both dead men!"

Throwing out one arm in a subconscious gesture, he touched the pipe that led from the

tank on his back, and turned the tap. A stream of pure oxygen hissed out near his nose, scorching his lungs like fire.

He found himself tightly held round the legs and chest by snaky branches of the trees, and being lifted by them. Carnivorous plants!

CHAPTER III

The Venusians

WRIGGLING desperately, Harley managed to slide his hipbone free and get out his explosive pistol. In reaching for it, he touched another limb with his head, and it instantly whipped round his face, nearly stopping his breath. Blindly he fired. Instantly there was a deafening crash and a fearful shock that was almost fatal. Splinters and drops of warm, sticky moisture struck his face.

He was falling headlong, Loted with him. He saw Loted strike the main stem and sprawl, apparently dead, on his face. Then he struck the soft ground himself. He was not unconscious—but he might almost as well have been, for his weapon was now yards away. The persistent plant had not released him, and presently he was swinging aloft again. A large pad fastening on his breast. He felt the beginning of the suction that would presently draw all of the blood from his body.

As he hung upside down, he saw six ridiculously complicated creatures hopping about with an absurd air of dignity through the gloom below—creatures with two bodies, one growing on a sort of stalk out of the other. He saw that each individual was not one but two, that a novel form of animal rode, standing up, on the three-legged beasts as though the latter were horses.

These newcomers, to whom the green things were obviously inferior, had egg-shaped bodies, red and purple, with no heads, one flexible leg ending in a round pad. Yellow beak-like tubes, four in number, stuck out of their middles. They had two triangular eyes one staring ahead, the other at the back. Each had two arms like branching whip-lashes.

They stopped and looked up. For awhile they conferred together. Then, reaching a decision, they pointed upward with some sort of weapon. Dense clouds of acrid smoke, smelling like burning flesh, arose. There was a crackling and sizzling and a screaming and Harley fell again to the ground, this time losing consciousness.

* * * * *

When he recovered, it was to find himself lying face down on one of the green beasts, held in place by its strong tail and being carried in a series of leaps over the plain. His body was a mass of cuts, burns and bruises, particularly his back. Twisting his neck he caught sight of Loted, captive like himself on a green steed.

"Woke up, have you," exclaimed the financier, who had escaped with little injury. "Nice mess you've got us into now, eh?"

Harley bit his lip. Indifferent as he had appeared, the great man's defection had hurt him deeply and some of his gibes did find chinks in his armor. Craning his neck to see ahead, he saw that they were approaching the town that looked from a distance like a group of mushrooms. Up and down the tall stems hopped dozens of the unipeds, using steps that stuck out like large teaspoons.

Arriving at the town, the procession went on through the stems to a large building on three pillars high above the rest of the town. Here they were lifted down, and it was made plain that they were required to ascend.

Expecting the frail branch to break, Harley tried it. But though it bent under his weight it held and he went on to the next. Loted followed. At last, sweating profusely, they reached the comparative safety of the unrailed platform at the top and followed Harley inside.

"Pleased to meet you," said a low voice. Both men jumped and looked around for the speaker but no one was there except a particularly tall uniped, over seven foot high, regarding them solemnly with his big triangular eye

"I see," went on the voice, "that you are incapable of telepathy, just as your planet would be incapable of interplanetary communication but for the power of our instruments. Among us individuals who have no more telepathic powers than you are objects

of pity. I welcome you to Venus. When you are rested and refreshed, we can talk."

Completely bewildered, the two men found themselves shut in a small room that was empty save for two bowls of a grey-greenish paste on the floor. They tried it. It was intensely salty and had a peculiar flavor, but was not altogether disagreeable.

"Didn't seem a bad sort," observed Harley. "Fine thing, being able to understand him right away. Keep on the right side of him and I can see our mission being completely successful."

"Yes," agreed Loted, stretched on his back, "but you know, old fellow, I am more accustomed to conducting negotiations than you."

Before long his opportunity came, for a small uniped suddenly flung open the door and beckoned them out. Waiting for them were the tall uniped and several others.

"We thank you for the hospitality," began Loted, "you have extended to us, and for saving us from the red trees. We have—"

"Cease your infernal babbling!" The forceful telepathic message crashed into their brains with the violence of a loud shout. "Treacherous, murderous beings! While I have been entertaining you here, you have been planning the death of my subjects. What is this terrible trap of which you told me nothing, by which you have done to death my sons and daughters?"

The complete change of face, so sudden and unexpected, took the space-travelers off their balance. The angry Venusian seemed to search their minds.

"Hardly had your vessel been found and brought here and my own children, eleven of them, gone to examine it, before cries of agony were heard. I received their telepathic calls for help. They have fallen, every one, with a feeling as of flames consuming their insides. How have you done this thing?"

HARLEY suggested he should go and see what was wrong.

"And make your escape? Six of my guards will take you there and this big stupid man I shall keep. Remember, my word is law. If my children do not return alive and well, if one dangerous weapon is found on the vessel—you will both be very long dying. Take him!"

As Harley stepped out onto the platform, he looked down upon a milling mob of Venusians. Their fury beat upon him with an almost physical force, like a strong wind. He followed the guards down and around the post.

Some way from the town, near the yellow sands of the sea, Harley saw the eggshell which had brought him here from millions of light years away. That it had fared roughly in the hands of the Venusians was evidenced by a jagged hole in the side through which the party entered. Once inside, Harley breathed deeply the delightful fresh air, to realize abruptly that it was too fresh. Around him the guards were making strange noises.

"Oxygen's leaking," he muttered.

Through several rooms, disordered by exploring Venusians, they went. The guards, despite their obvious distress, kept up with him. They came upon several contorted corpses, then to a room heaped with bodies. An oxygen supply pipe ran here. The tap was turned out and the tanks were empty.

The positions and attitudes of the torn and tortured unipeds told their tale. Ignorant of the functions of taps, they had turned it and passed on until their breathing-tubes scorched, they made a hasty retreat past the open tap. As they reached it in their flight they had one by one collapsed.

A Venusian, gasping painfully, grasped Harley's arm and pulled. A prophetic vision of his fate in the hands of the angry king came to him. The extra supply of oxygen had cleared his brain.

He struck with his free arm at the triangular eye of the creature that held him. To his profound surprise, it was softer than jelly and his arm plunged deeply into the uniped's substance.

Appalled at this, to them, supernatural strength, the others were too startled to move. Harley, realizing that he must now fight to the death, picked up a chair and despatched two more. But the other three were out of reach and raised weapons similar to those he had seen in action against the carnivorous trees.

A tremendous roar filled the room and he was hurled to the floor, his fall broken by soft bodies. So this was death, he thought, noting with calm, detached interest that he felt no pain.

A moment later, he realized his mistake. Incredibly, he was not dead but all the

Venusians were. Staggering to his feet he looked out of a splintered window to see that an explosion had wrecked the space-ship and hurled the fragment he was in high into the air.

Possibly the escaping gas had found its way to the remaining Venusite and detonated it or possibly some exploring uniped, escaping the fate of his companions, had reached the control-room and meddled inexpertly with the machinery.

Now he was falling precipitately and stretched himself on the corpses to break, as far as possible, the force of the drop. When the shock came, it was less violent than he had expected but left him plastered with unpleasant jelly. Through the hole where the window had been water poured. He had fallen into the sea.

Unable to reach the window because of the force of the water he pushed at the door but it refused to yield. He tried the window again, unavailingly, then went back to the door. This time it gave, for the mounting water had increased the internal air-pressure. Like a cork he shot to the surface.

He struck out for the beach, not for the nearest point but to the left, so as to have a clump of red trees between him and the enemy. Though his limbs were stiff his body was buoyant in the brine and progress became rapid. Before long, he touched bottom. Something soft and sticky brushed him and stung painfully.

Landing, he found himself hidden from the town. The only visible evidences of the unipeds were several of their three-legged steeds, who were watching him with such wide-eyed curiosity that he wondered whether they would be able to tell their masters what they had seen.

Clearly, he must find cover. But before he could make the journey to the dense vegetation of the swamp, he was certain to be discovered. His badly treated body would not keep on much longer without rest. If only the three-legged beasts would carry him as they had before! And why not?

Concentrating on the nearest he endeavored to make it come to him. At first he was unsuccessful, then he noticed that it was uneasy, looking all round. Another effort, greater concentration, and it came hesitatingly up to him. In a second, he was on its back, directing it to the marshes. The animal must have realized his difficulty, for it raised its tail and held him in place.

Making a wide detour, he saw that the explosion had wreaked havoc on the mushroom town. The big three-pillared building stood among a mass of ruins. Fervently hoping that none of the Venusians would see him, Harley flattened himself out as much as possible, and urged the beast to hasten. Suddenly a number of mounted unipeds came charging out of the heaped wreckage. They had seen him!

"Hurry!" Harley commanded his steed, but it hesitated and stood still. After a moment's cogitation, it turned and went to meet the approaching Venusians—for it obeyed its familiar masters. The tail that had kept him from falling off, now gripped like a vise.

CHAPTER IV

In the Swamp

HE STRUGGLED and beat at it with his fists but it only increased its pace. He wished that he had something that would serve as a weapon but everything had been taken from him or lost save a broken watch and a lead pencil. A fragment of glass cut his finger. Snatching out a jagged piece, he began to slash at the gripping tail. Suddenly he found himself released and falling.

Making a desperate dash for the bushes, he felt waves of air, hot as a furnace, beat upon him. Smoke arose from the ground. Soon there was a thin veil of scattered plants between him and his pursuers; then he was altogether hidden and his feet sank into the soft ground. Still he ran on.

Ahead of him lay dangers as great as those behind. Numerous small things scurried about, any one of which might be poisonous. Quagmires into which he would quickly sink to his armpits lay among the shrubbery, awaiting a too hasty step.

Then mercifully the light began fading. Completely exhausted, he decided it was safe enough to rest now for an hour or so. Making a rough couch, he lay down in the middle of a clump of bushes and was soon asleep in the absolute darkness of the warm Venusian night.

Scurrying across his face, something warm and furry, fleeing from something larger, woke him. It was day. His limbs were stiff and he was hungry. The branches were laden with fruit, something like plums, that had been extensively gnawed by animals or insects. They tasted watery and sharp but he made a good meal of them.

Feeling better, he walked into an open space. Sounds of snapping of branches warned him that something was coming and he ran for shelter just as a group of green beasts came into view, each animal carrying in its tail a dead Venusian which it laid upon the ground near Harley and left. At the end of the clearing, they paused and sniffed inquiringly, then raced off at greater speed.

A loud flapping of wings made him look up. He saw a company of gray batlike birds, with bodies eight feet long and wings thirty feet from tip to tip, settling down in the clearing. Quarreling and fighting fiercely amongst themselves, they began to tear at the bodies with their terrible teeth. Soon nothing remained but the wings and beak of the eaten bird and gray stains that had been the life-blood of the Venusians.

This, then, was how dead bodies were disposed of here. Harley came out of his concealment, prompted by an uneasy desire to know what had caught the attention of the beasts. At the end of the clearing was a line of human footsteps. They were Harley's own and the beasts had seen, understood, and gone to inform their masters.

Straining his ears he could hear the dull *plop, plop,* sometimes accompanied by a splash, that the round pads of their feet made when in a hurry. The chase had been resumed.

NOT for long could he avoid being caught by those racing forms. His only hope was to hide his trail in water before he was seen. He fled in the opposite direction, seeking hard ground, undergrowth, anything that would hide the tell-tale marks.

But the ominous sounds were very near when he came without warning upon the arm of the sea that ran through the swamp and plunged in. Caution made him work his way along through the still water under the shadow of overhanging plants for about a mile. Then he struck out for the opposite bank.

Emerging from the water, he walked across a flat expanse, his feet sinking deeper and deeper with each stride. Realizing that he was in a morass, he turned to go back—but he could not pull his feet out. The yellow surface here was not the same moss as in other places but merely a thin film over blue-black, clutching mud that stank of all the abomination imaginable.

Embedded to his knees, he gave up his useless struggling and tried to think his position over calmly. Overhead, tantalizingly out of reach, was a strong bough by which he might yet pull himself out. With a great effort, he managed to get the tip of a twig between the tips of his first and second fingers, he drew it toward him until he had it fairly in his hand. Then—the twig snapped.

Hope gone, he lay back and spread out his arms so as to present as wide a surface as possible. This enabled him to gain time but the mud must win in the end. To be drowned in mud!

However, he soon saw that he would not live to meet that fate. Two of the gray birds, scavengers of the marshes, had seen his helpless position and flew to the feast, great jaws agape. Even the unipeds were preferable to this and he screamed aloud for help.

Leathery wings flapped near his head, dagger-like teeth snapped at his eyes. He dodged and beat at them with his hands. The birds quarreled and bit at each other in dispute over his body, and one was driven away, dripping gray blood. The other resumed the attack on the helpless man.

It dropped one wing as though about to strike with it; but the blow was not delivered, the wing hanging helplessly instead. Smoke was rising from where the wing joined the body. The helpless bird fell onto the marsh, fortunately out of reach of its intended victim, to be instantly seized in the inexorable grip.

Harley turned to see who had so opportunely come to his rescue. He expected to see unipeds. Instead the welcome sight of his traveling companion, looking rather wild with clothing singed by fire and plastered with mud, met his gaze.

"Loted!" he called.

"Hello, Harley," said the man. "You've got yourself into a nice pickle. How am I to get you out?"

"You can't. Leave me. If you come closer you'll sink yourself."

"Nonsense. I don't want to be left alone in this unsavory world. I'll find some way. What about that branch above you? Perhaps I could crawl along that."

New hope came to Harley. "You might be able to do that."

STRUGGLING up the tree, Loted wriggled along the branch. It bent under his weight, but not far enough for Harley to reach. Presently the two met and Loted, bending down, seized the other around the waist. Harley took hold of the branch and pulled for all he was worth. Slowly, reluctantly, the clutching mud let its victim go and Harley struggled out and crawled to safety.

They looked at each other.

"I thought you were blown up," said Loted.

"And I thought the unipeds had killed you."

"It was like this," explained Loted. "When you fired your mine —I don't know how you did it but it was a rattling good idea —the door of my cell was broken open and I saw that the one-leg outside—their bodies are quite soft, and seem to have no bones—was dead.

"Taking his heat-ray and those of several others who were lying around, I went into the room of the big one-leg. He bolted when he saw me coming in with the ray-guns and I wriggled through a crack in the floor and slid down a post.

"A few survivors hid among the ruins and potted at me, but I won and got away to the swamp. Then I heard you yell and knew you were still alive. It sure takes a lot to kill you, Harley."

"What of you? Judging by your clothes, some of their shots must have come near making an end of you."

"Well, they didn't. The only question I am interested in at the moment is, have you found anything good to eat?"

"Yes, the berries on some of these bushes are edible. That reminds me, I've got an ache in my stomach. Gosh, that *was* a spasm."

Harley's digestive organs could make nothing of the unfamiliar substances that had been thrust upon them and presently he was seized with a fit of vomiting. Weakly he tottered away with Loted to a dense thicket on high ground where they were secure from observation, even from above.

"I don't think I'll try your plums," said Loted. "I had the same experience when I killed and cooked a small animal with a heat-ray, so I know what it's like. What now? Stay here until we starve and the birds eat us, I suppose."

"I suppose so," muttered Harley gloomily.

The sky was an endless dazzling white, the dense cloud-layer of Venus. In the marshy forest not a leaf stirred. The jungle seemed to wait patiently. Harley fancied that he could almost feel the gaze of a hundred hungry things waiting for the feast.

Heat and hunger played tricks with Harley's eyes and brain. Before him a mist was rising from the ground, swirling and eddying, wreathing itself into strange shapes. In the middle of it a large round eye appeared and gazed at him in calm reflective fashion.

Around the eye the mist shaped itself into an apparently solid body. It had two legs, similar to but slenderer than those of the unipeds, and its oval body was draped with a purple material on which were many designs. Otherwise it was much like the unipeds.

Into Harley's mind came the idea of gentle amusement, as though they were being laughed at, then a telepathic message.

"I do not admire your manner of welcoming one who has come to rescue you, aiming a ray-gun at me. However, I do not advise you to use it, for, while you cannot harm me, you might start a fire from which you would have difficulty in escaping. Actually I am using a thought-projector to throw my picture into your minds."

"Who are you?" demanded Harley.

"A representative of the rulers of Venus."

"Then the unipeds—?"

"Like their green beasts," said the vision, "and the red trees, they exist only in this one spot, which we keep as a zoo. It was unfortunate that you should land in this very place but really, you know, you have only yourselves to blame, for you tried to keep your visit secret. Seeing you land in the very worst place you could have chosen, and watching your subsequent adventures has been the biggest joke Venus has enjoyed for years."

"You have been watching us?"

"The whole time, in telescopes, and the show has been relayed to every native home on the planet. We thank you for an excellent entertainment and in return we rescue you from your troubles. Leave your guns on the ground and follow me."

Some subtle force from the figure made them obey unquestioningly as it led them, floating several inches in the air, through the marshes. On the way they crossed a glade where three unipeds, who were following Loted's tracks, mounted on green beasts, bolted in terror.

At last, reaching an open space where the ground was firm, they saw before them a cube, twenty feet each way, seemingly of porcelain in the color of new leaves. There was a door in it beside which stood a creature similar to their guide, wearing a red robe.

Half expecting the whole mirage to vanish, Harley put a tentative foot inside. It was material. They entered. Forthwith, the bushes and trees and all the varied life of the swamp dropped away below them. So perfect were the driving machines that one was unconscious of any movement. Now they were looking down on the valley with its coiled arm of sea and shattered mushroom town. The landscape began to flow steadily to the east.

Within the cube was one compartment and the green walls, opaque from outside, were transparent from within. Beneath their feet, far below, was the sea. The three Venusians tending the green metal machinery in the center of the floor ignored the earthmen completely, even when Harley tried to question them.

It was impossible to judge how far they had traveled when at last they descended upon a land green with fertility.

"Am I dreaming?" demanded Loted, suddenly gripping Harley by the arm. "That tree looks exactly like an earth-oak to me."

"It *is* an oak," said Harley, "and there is a maple, and a fir. See that? That was a rabbit, and there's a pigeon."

"We shouldn't starve here," murmured Loted softly, "and personally, I should like to get away from these things who are looking after us. I don't altogether trust them. I believe we could open the door and slide away before they missed us."

Harley assenting, they casually pushed open the door and walked quickly but quietly across genuine grass. In a few moments, they were concealed and looked back to see the green cube sliding softly as a soap bubble into the sky.

"We were meant to get out here," said Harley.

"So it seems," agreed Loted.

CHAPTER V

Human Guinea-pigs

PUSHING their way through a regular thicket of laurel they came with startling suddenness upon a path running around a plot of cabbages set out in neat rows. Beyond the cabbages a field of blue-flowered potatoes peeped at them through currant bushes.

"Some earthman planted these," declared Harley.

At that moment a white-haired man, inclining to stoutness, appeared, walking thoughtfully along the path towards them. He wore a suit of old-fashioned cut, so patched and darned that it was nearly falling off him.

"Pleasant weather," he observed. "These confounded rabbits raise hob with the cabbages."

They now observed that he carried a hoe in one hand and a cunningly contrived snare in the other.

"We are strangers here," said Loted, "only just arrived."

"Indeed?" said the stranger, looking them over. "Yes, come to think of it I've not seen you before. All I can say is that you've got your clothes into a nice mess already. What are they going to be like when you've been here thirty years as I have?"

"Can we get food and drink here?"

"Have you got any money? Otherwise you'll have to give me an I. O. U. Prices rule rather high here, you know."

Loted was well provided with currency notes, but Harley had to ask for credit. Payment having been made in advance, their host led them to a medium-sized bungalow of bricks and stone and soon laid a meal before them.

"The only drink here, I am sorry to say," said their new friend, "is water. Though we all, at times, sigh for those three dear old curses of earth—alcohol, tobacco, and tea—I am sure we are better without them. If ever I got back I should lead a big campaign against tea, cause of half the ills man is heir to.

"There are some annoying inconveniences that we have to put up with," he went on chattily. "For instance, we cannot produce glass and have to be content with holes for windows. Fortunately, however, the climate is usually too hot for windows."

"Are there many people here?" queried Harley, his mouth full of stewed rabbit.

"About thirty, all male. Every time a space-ship sets out for Mars or Venus it finds its way here in the end. But the kind attentions of our Venusian masters prevent our numbers from becoming unwieldy. They intend to colonize Earth and keep us here for purposes of experiment and observation.

"They work in secret, and don't intend to lose any Venusian lives over the business if they can help it. It seems that the various forms of life on a planet are so interdependent that no high form can flourish without a myriad of lower forms to support it."

Harley explained Earth's trouble with gigantism and acromegaly.

"Probably one of their minute cultures is the cause of it. They try them on us. Then, if they prove successful, they introduce them to Earth. I understand that their method is to carry spheres full of spores and drop them into the atmosphere.

"The spores are practically indestructible and the containing spheres are so light and fragile that they sink slowly. The wind rends them to fragments in the denser strata of the atmosphere. Thus they are slowly establishing Venusian life upon Earth.

"Some die out quickly, some last longer, but they tell us every step, for they do not conceal their plans from us. Makes others easier. Foundations are steadily being laid. Even the larger things are now engaging their attention. Already several Earth species have been destroyed and one or two Venusian plants firmly established."

"You're right!" exclaimed Harley, leaning back and staring at him. "That pear-tree we passed on our way to this house is the first living one I have seen for years! That mysterious disease, yellow canker, destroyed them all. I remember reading an article by a scientist in which he remarked on the exceptional activity of Nature in the last century or so in evolving new plants, many of them without any apparent relationship to previously known species."

"Plants first," said their host, "then animals. And then—" He spread his hands.

AFTER lunch he led them to a small room without windows. Floor, walls and ceiling were lined with lead.

"This, my friends, is the only place on the island where we can talk without fear of being heard and understood by the Venusians in the machines they use. While outside, I always pretend to be helplessly resigned to the plans of these beasts but here I can reveal my plans.

"Earth shall not succumb without a blow being struck for her. I know for a fact that nothing they have introduced to Earth will long survive in competition with the natural life of the planet. Cut off the supply and they will disappear one by one. A hundred years will see the last of them die out.

"And there is a way of stopping the supply. They breed strange, deadly forms of life, but two can play at that game, sir—two can play at that game! I have evolved a monster!"

He glanced furtively about, then continued in a hoarse excited whisper.

"Yes, I have created a terrible thing. It looks innocent enough and peaceful—so peaceful! But its powers! Its bite is poison; it breeds rapidly. It will burrow through the ground and through the walls of their houses. It will devour their crops and their food. It will break the power of Venus!

"When I take you out and show them to you, reveal nothing of your thoughts in your faces and gestures. They must never suspect Earth's reply to their schemes before the time comes."

Blowing out the smoky oil lamp, he led them into the garden and showed them a stone pen into which he invited them to look through the wire mesh. Hardly daring to breathe they approached, and saw—running about within and heedless of their presence—six white mice.

They smiled and winked and nodded after the fashion of people sharing a great secret,

then wandered away in search of more congenial company. Soon they found another man, old and stout as the first, to whom they talked and told their story.

"So you've been talking to the Chief Biologist, have you? Of course, though we call him that to please him, he is really quite mad. And hardly any wonder when you remember that he's been here thirty years. The longest I have ever known anyone to remain sane here was twenty. Everything else he told you is correct, for he is fairly lucid on almost anything except those silly white mice of his.

"Now there is one thing I must tell you. Mind, I am not annoyed with you. I recognize that you are strangers here and sinned in ignorance, so I am prepared to overlook it. But in the future when you speak to me you must address me as 'Your Majesty.' I happen to be King of Venus. All the Venusians do as I tell them, and I hope to establish a dynasty and maybe extend its realms to include Earth. As to this business of Venus colonizing the Earth, I gave orders for that to be stopped long ago."

They apologized to "His Majesty," and departed.

"Is there no sane man here?" groaned Harley.

"Unfortunately, yes," said a voice from the other side of a loganberry bush. "I believe I am one."

The speaker proved to be a man in a wheel-chair. The hands resting on his lap were little more than skin and bone. His face presented the shriveled, dried-up appearance of age, yet the eyes were those of a young man.

"Why, Harley," he croaked. "*Martin Harley!* How come you to this place of despair?"

Startled, Harley recognized Grumbolt Lowther, who had been the football captain in the same college at which Harley had been educated.

"We set out for Venus," said Lowther, "some twelve years ago, hoping to help humanity. But we have become instruments of evil instead. They take each of us in turn, try this culture and that on him until they find something harmful.

"Only a few of our original crew still live, and those have purchased their right to exist at the cost of their sight or hearing or sanity or a multitude of unpleasant sores—every man something. Tell me, has this trouble of mine appeared at home yet?"

"Not to my knowledge," said Harley but Loted was better informed.

"A disease with symptoms similar to yours has shown itself on Earth," he declared. "I know because I floated a company to market a cure. But it has not obtained a real hold. Patients usually recover after awhile."

"Thank heaven for that." The sufferer closed his eyes for a moment in relief. Then he went on. "How delighted we were when we found ourselves nearing Venus and a huge semi-transparent octagonal ship met us, informing us that we were the first travelers to make the journey!

"They asked us to follow them, promising a grand reception—and presently we found they could communicate with us without the aid of any apparatus on our ship, by means of those cursed telepathic machines of theirs. Then we discovered, too late, that we were helpless to resist the directions they transmitted in this manner.

"Compelled to disembark here, we found an Earth colony already established and saw our vessel taken away. Since then we have been little better than automatons. We grow our food and live our lives on this island but we are watched the whole time. None of us knows when the summons may come for him to walk away to one of their green cubes to be carried to their laboratory and experimented on. We are even afraid to plan resistance, for we never know when they are reading our thoughts."

* * * * *

LOTED and Harley were accepted into the melancholy little community, the Earth colony of Venus. Heroes all, at one time among the boldest spirits Earth could produce, they now dragged out miserable existences, hopeless, apathetic prisoners of Venusian masters.

On the island, which was some fifteen miles in diameter, without power or machinery, they lived primitive lives, all their energy expended in feeding and sheltering themselves. They lived for their dreams of the past, tired men waiting their turns to find rest in the cemetery that slowly spread on

the side of the hill.

The supply of seeds and young plants and animals was replenished from time to time by the Venusians, for the second generation of Earth life on Venus lacked vitality, as did men who had been there for many years. How these supplies were obtained without the knowledge of Earth was a mystery.

The colonists kept up a semblance of a social system in miniature, based on the money they happened to have with them. There was a Legislative Assembly and a Court of Justice where such important questions were tried, as—was A entitled to construct a fowl-house in such a manner as to keep the sun off B's washing?

Harley, having no money, went to work in the brickworks until he could achieve independence. Loted revealed the large supplies of notes he had planned to take to England with him. There was enough to support him in comfort and idleness for many years. But the other members of the colony put their heads together and enacted a law whereby the Rate of Exchange should be one hundred fifty dollar notes issued after 2247 to one dollar, gold or paper, issued before that date. Thus the value of Loted's money was drastically reduced. Loted waxed eloquent about the Iniquity of Deliberate Class Legislation.

"Personally I don't believe it," said Harley, without pausing in his work of stacking clay blocks for burning.

"Believe what?" asked Lowther, maneuvering his wheels to get around a tuft of grass.

"The phenomenal powers you ascribe to these Venusians. I admit that they can see us from a distance, that they can influence man's actions while far away. You have convinced me they can read our thoughts when we are near their machines. But I refuse to believe that they know everything that passes through our minds when we are far from those machines."

"Don't work too hard, old chap, or you'll soon have made all the bricks we want and then you'll be unemployed. I don't believe it myself."

"What about trying to escape? I know it will be dangerous, but what if we do lose our lives in trying? We have little enough to look forward to."

"Steady, old chap, there's plenty of time. Most of the men are cowards, but some of us, five in all, think as you do and are ready for the attempt. I will be responsible for you and let you know our secret plans. Can you vouch for this man Loted?"

"I can."

"Very well. We never meet together more than two at a time lest we attract attention Now listen. Sooner or later, either Loted or yourself will be taken to the Experimental Laboratory. Until your coming, we were beginning to fear that one of us would have to undergo the experience a second time but you have eased our minds in that respect for awhile, at least.

"Not very far from here is a building like a huge chimney. It is built on a hill and its summit rises far above the clouds, supporting a platform larger than a square mile on which the laboratory buildings are situated.

"I was there some years ago, when I contracted this complaint of mine, and as I was being brought back I managed to take away the pistol of one of the Venusians without his noticing it for, clever as they are, they are sometimes absent-minded.

"This is our plan. When the green ship comes, the member of the committee who sees it will go to the apple tree nearest this quarry. Near the trunk he will see a ring in the ground. Pull up that ring and the pistol will be seen lying in a tin box.

"The pistol gives forth putrefaction-rays when the button is pressed. You will understand the effect of it when I tell you that I killed a rabbit with it and the body was as though it had been dead a week. Once we can get to that elevated laboratory, there is a room in it housing the controls of the interplanetary transmitter. I saw a Venusian operate it. We can get to that room and send a warning to Earth."

"I hope I am next to go," cried Harley, his eyes aflame. "I shall carry that pistol."

"You will do nothing of the sort, for they will read your intentions in your brain before you enter. No, we must capture a green ship, pilot it there, then make a surprise attack on them."

Harley passed on the information to Loted, and a period of monotonous waiting began for the Committee. It was a pathetic committee. One was blind, one deaf, one had valvular disease of the heart and might fall dead at any moment, the last had but one

arm, his other having dropped off bit by bit.

Days passed. Meeting Loted near the beehives Harley spoke to him without getting a reply, then saw that he walked unseeingly, like a man in a trance. The "summons" had come to him.

The period of waiting was at an end, the time for action had come!

A few moments later, Harley lay on his face among the currant bushes and watched the open space where the cube always landed. In the middle of the field stood the unconscious financier, waiting to be carried away.

CHAPTER VI

Warning the Earth

NOISELESS as thistledown, the beautiful polished vessel drifted to a resting-place. Dimly through the walls they could see the machinery inside and the three oval-bodied Venusians tending it.

"Will the ray operate through the walls?" whispered Harley, anxiously.

"They will come out," returned the one-armed man. "Better let me have the gun. I have practised with it and know how to focus it so as to bring down our quarry without killing the man as well. If I can I'll miss him—if I can't he'll be unlucky."

True to his prediction, the three Venusians came out and stood by the open door. Harley thought it an insolent gesture of power to expose themselves so recklessly.

"You could get them all now," he murmured.

The one-armed man muttered imprecations. "I'm trying to but I can't get the gun to work."

A sleek, beautiful wood-pigeon, sailing in graceful ease to a landing before them, suddenly crumpled in the air and fell in an untidy heap.

"The ray is working, all right," said Harley in a tone of utter despair.

"I might have known it," groaned his companion. "The chemical structure of Venusian bodies is so different from ours that this weapon is designed to have no effect on them. No wonder they never troubled about our possession of it."

As the green vessel floated away unharmed, he cast the useless pistol from him and rose up among the currant bushes. He was weeping with the abandon of a child.

"I hoped, before I died, to see Earth strike a blow at the dominance of Venus but now I know that I never shall. Soon the mortification that has robbed me of my arm will reach my heart. And I have clung to life, fought to live, for this day!"

Of all this the abducted financier knew nothing. Perfectly conscious and aware of his surroundings, his body was out of his control as it carried him, against his will, to the landing-field. It was not until the Venusians arrived that he realized what was happening. Expecting every moment to see them collapse, he struggled against his rebellious muscles to keep back out of the way of destruction—but nothing happened.

He had a few unpleasant moments when he knew he must be in the line of fire. Then, he was cursing in his mind the cowardliness of the dilatory Committee carrying him to unknown perils, to be a subject for fiendish science. Terror—terror of the unknown—possessed him like the fear people have of a first operation under anaesthetics, but unhappily without the comforting assurance of the surgeon.

Still he was able to take an interest in his surroundings. In a minute or so they were above the cloud envelope, bathed in blinding light and looking down on a white floor that stretched in every direction and looked as though a man might walk upon it. It was hard to believe that this was not the real surface of the planet. Many miles of this monotonous expanse they traversed until they came to the landmark so often described to him, a slender pole rising high out of the clouds with a platform bearing buildings at the top.

Marveling, he stared at this unbelievable feat of engineering. The advantages of its position for the purpose of astronomy, he realized at once. But he wondered what happened to the precarious structure in the event of a violent storm or an earthquake. It was extremely top-heavy. So clearly did he formulate the question that the Venusians perceived it and replied by telepathy.

"A storm," they told him, "would affect only a relatively small portion of the staff and would hardly be felt. In the event of an

earthquake the staff would not sway as a whole but the shock would travel upwards, giving those at the top ample warning."

AS THEY approached Loted saw that the first appearance of smallness and slenderness had been deceptive. The platform had an area of more than a square mile, the support being proportionately huge. Still guided by the mysterious influence, he stepped out of the cube and walked over the surface to the buildings.

Rough floors seemed to afford good foothold for the wide pads that were the feet of these creatures, but it was hard work for the financier, who was breathing heavily by the time he completed the half-mile of the central building of the elevated village.

"Enter, creature of Earth!" It was a deep bass voice and woke Loted sharply to alertness. Two of his conductors seized his arms in their whipcord tentacles and guided him through a door which promptly closed, shutting them out.

He looked around. It was a lofty room, lit with red-tinted light, with ridges running across the floors and many ornamented pillars. Three purple-robed Venusians awaited his arrival.

"Approach," said the bass voice. It *was* a voice and came from a corrugated sounding-board on his left. Obeying without hesitation he advanced toward two machines suggestive of searchlights, from one to the other of which stretched a pale blue haze.

When he reached the exact center of this haze, a sharp command directed him to stop. He could feel his mind being pried into and knew that his conscious thoughts were open to inspection. Accordingly he concentrated on the idea of how great and powerful the Venusians were, for he was a tactful man.

"We thank you for your compliments," said the voice. Loted wondered which of them directed the reply but they had a deceptive appearance of taking no interest in him or in anything else, of doing nothing. They ignored him as completely as they did the perfect working model, wonderfully made, of the Solar System, that spun, unsupported and unheeded, over their heads.

"We were particularly interested in you," went on the voice, "because you are a living example of the effect one of our preparations is having on Earth. We see that your body is growing out of shape and that the condition is gradually weakening you in a way that will ultimately be fatal. However, it will not prevent us from making use of you."

Sweat broke out on Loted's brow, for to the last moment he had hoped that he would escape the usual fate. "Do you mean to use me for your experiments?" he asked hoarsely.

"Certainly. You were not asked to come here and you must pay for your intrusion. You may not die as a result of our activities. There is quite a chance that your condition may be fatal before our efforts are."

"Wait a moment. I am an important man on Earth. I may be useful to you."

"How can you be useful to us?"

"By describing to you the ways, the weapons and the resources of Earth."

"Your treachery would be idle. Already we know more about that than you do."

It came to him in a flash of inspiration, the way to save himself.

"There is some important information I can give you," he cried.

Now he knew that he had them interested.

"What is this information? We see that you believe it to be important to us."

"Can you cure my acromegaly?"

"If we wish to."

"Do you promise to cure me, not to experiment on me, but to allow me to live in comfort, even to protect me from the vengeance of my fellows in return for the information?"

"If it is important, we will."

He described the plans of the committee, named the members, told of the possession of the gun, and described its hiding place. One of the three Venusians went out.

"As it happens the plot would be harmless, but for their temerity in imagining such a thing, your Committeemen will all meet a particularly unpleasant fate in a few hours. Enter that room on the right."

Something snapped in Loted's brain. These things were double-crossing him. A man accustomed to treachery, who broke faith as naturally as other men eat, he knew from the mocking undertone, the subtle flavor of triumph in the thought waves that reached him, that his captors meant to dishonor their words. A black flood of fury filled his mind, driving out all fear, all reason. He leapt madly at the nearest Venusian.

NOW every intention that came into his mind, every plan he formed, was revealed to the Venusians by the vibrations of the machine, so that they always had notice of what he was about to do. Had he harbored the slightest thought, the slightest desire to attack them, they would have known and been on their guard.

But by the merest fluke, by the mere fact of conceiving his rage and acting on it at the same instant, he achieved the seemingly impossible. He took the unipeds by surprise. It was a possibility they had not foreseen, as completely an accident as the falling of a tile from a roof onto someone's head, that a man should act entirely without meditation.

Seizing a whipcord tentacle in one hand, he wrenched at it, and swung blindly with his other fist at the body he pulled towards him. His hand burst through the skin with a soft *pop* and gray fluid poured from the eyes and breathing-holes. Turning on the other in the same instant, he aimed at it a furious kick that threw him backward, the mutilated corpse on top of him.

Both Venusians lay dead and Loted, still holding the arm he had torn from the body of the first, looked at them and at the spreading stains and wondered what had happened. There was a frightful pain in his left arm, and he vaguely remembered seeing the aiming light of a ray-gun resting on it for a second. It smelt—vile. From mid-forearm down his arm was dead and putrefaction was well advanced. Reason told him that a man could not live for more than a minute or so with a limb far gone in decay, for the blood would carry the poisons all over his body.

Revenge! He had a few seconds to revenge himself by wreaking all the harm he could on these things. The interplanetary transmitter! He would warn the Earth!

Madly he raced down the corridor, following half-remembered directions given him by men who were now doomed to death by his own act. Abruptly he found himself before a great mass of apparatus. The switch! He found and closed it.

He did not know the interplanetary code but that didn't matter, for he could speak in English, trusting to the operator at the other end to make a record of the sounds if he did not know that language himself.

"Hello, is that the receiving station on the moon? Hello, is that the receiving station on the moon? I am a man speaking from Venus."

By now the record should be started.

"A man speaking from Venus. The Venusians are waging war on Earth. Their space-ships are dropping huge but light spheres full of disease-producing spores into the Earth's atmosphere. You must find some way of destroying the spheres before they reach the lower levels. I don't know how it can be done."

His dry throat refused to proceed. There was no answer. There could be no answer for some time yet—so he had no means of knowing whether his message was heard or even whether he had succeeded in getting the apparatus to work.

His head ached appallingly, making the outlines of the room unsteady around him. He thought of his life on Earth, his humble beginnings, his struggles, his colossal power that had been a colossal swindle.

Ah, well, it had been so easy to be dishonest and the rewards were so huge. The world rewards dishonesty and punishes honesty. He was not really to blame for what the structure of society had forced him to—the harmful drugs sold as medicines that had been the beginning of it—the companies he had floated later, whose disappointing results he had bolstered up with ever more and more wildly inaccurate bookkeeping, assets shown at ridiculous values or included in the balance-sheets of six different concerns.

Huge claims by each of his companies on the others, all remaining silent about what they were supposed to owe—auditors who had to certify what he told them or lose their means of livelihood. Weigh it all up and his life had been an utterly harmful, useless thing. The world was much worse off by reason of his life. And the others were the same. Sooner or later they crashed and the world still blindly trusted those who managed to maintain the illusion.

As a youth he had longed to be great and to do good, only to find that he could not do both. Finding himself among men playing a financial game where the most unscrupulous won, he had set out to play that game well, never thinking of the human lives he was juggling with.

His pain was gone, probably a sign that the end was near. He thought of Harley.

(Concluded on page 160)

COSMIC STAGE

By ROBERT ARTHUR

The Great Cardante's rescue of Earth from alien invasion was no magician's trick—but he was unable to repeat the performance!

SOMETIMES it seems that Fate must have her little joke—as if she can not arrange even the most momentous happening without injecting her bit of ironic humor into it. Even when, for that taut and terrible instant, our world hung balanced on the brim of destruction—

The meeting of the International Scientific Congress of 1944 had gone badly from the start. Whether it was the mountain atmosphere—the meeting was held in Denver—or what, the whole six-day sessions had been one continuous wrangle from beginning to end. Gustave Werner, whose daringly inde-

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pendent mind was continually surprising the other scientific brains of the International Scientific Society, was out of temper.

"Fools! Dolts! Idiots!" he shouted from the platform of the assembly hall. His face purpled. "To be talking of total disarmament and perpetual peace! Of a scientific oligarchy under which mankind will live in a world without weapons, even after I have read you my paper. I repeat, mankind will not always be mankind's worst enemy. We must prepare to conquer the forces of the unknown which someday will descend upon us!"

He waved his hand, clenched into a fist by the violence of his feeling. It was a sore point with him. The entire Congress had laughed at his ponderous scholarly report on "A Consideration of Possible Future Invasion from Undetected Dimensions."

Professor Waldemar Brisingham, a lean and sardonic scientist with a typically British conservatism, gazed at Werner with something like frigid resentment.

"My worthy colleague," he called out, "is back upon a topic this body saw fit to table earlier. May I ask him where this—ah—attack he so apprehensively anticipates will come from? Will it come from the fourth dimension? Or the fifth, perhaps, or the sixth?"

WERNER struck his fist into the other palm with a resounding smack.

"Yes!" he roared. "Maybe from any one of them! Certainly from one of the parallel states which my researches show co-exist with our world, some of them even in the same space but in different vibrational strata. Any dolt who cannot understand the meaning of my findings—"

The chairman rapped peremptorily and Werner was forced to subside, puffing and blowing, into his seat beside his young assistant, Terry Jennings. The Congress then blandly voted to go on record favoring the total disarmament of mankind. A committee was appointed to work out the best method of enforcing such a decision upon the world through the might of the solid union of International Scientists.

"Fools!" Gustave Werner growled into his red bristling beard as he tramped out of the auditorium with Jennings. "Dolts! They will not learn."

JENNINGS grinned. He was happy that the meetings were at an end. Tonight at midnight they'd be taking a stratoplane—the new strato-rockets were still too unreliable for public use—back to New York. And in the morning Marcia Grayce would be on hand at the lab to greet him.

"And now," Gustave Werner continued grumbling, "we must attend a foolish exhibition of prestidigitation. Oh, if only I could convince them! But no, they do not listen. Instead they hasten off to rest their mighty brains by watching a magician, a juggler, a mountebank—"

But Werner was hardly fair to the Great Cardante. The little illusionist was good. His show was diverting. It was made up of the standard formula materials used by stage magicians down the years—card tricks, disappearing young ladies, a little expert rifle and revolver marksmanship thrown in for good measure. But it was done deftly and swiftly. The Great Cardante might not be highly educated along scientific lines but he knew his own stuff.

The Great Cardante went through his routine confidently, working on the principle that the more intelligent the audience, the easier it was to fool 'em. It certainly seemed to be true tonight.

Something of the same thought was in Jennings' mind as he watched from near the front of the theater. Beside him, even Werner's grumblings subsided. An occasional muttered "Dolts!" was his only outward sign of annoyance as he became interested in the skilled legerdemain. Secretly Jennings thought that the chief had gone a bit off the deep end in his new report—had let his always active imagination carry him away into the realms of pure fantasy.

Terry Jennings' attention came back to the stage with a jerk. The Great Cardante had just finished a trick involving the apparent levitation, in defiance of gravity, of a large armchair with a personable young lady in it. Now the young lady dropped out. With the chair still several feet above the stage the smiling magician gave it a powerful shove that sent it flying toward the right rear wing.

Halfway there it vanished abruptly in mid-air!

The audience roared with applause. But the face of the Great Cardante himself registered the utmost surprise. He seemed be-

wildered, even slightly frightened, as he stood staring in a dazed fashion at the point where the chair had disappeared.

"Midge!" He spoke in a sharp whisper above the music, his words carrying only a few feet to Midge Manson, his chief assistant, who waited in the wings with the next prop. *"What happened to that chair?"*

Midge Manson gulped. "Ain't it something new, Chief?" he asked.

"New!" the Great Cardante muttered and restrained an impulse to pass a hand across his brow.

It was so new that it baffled him. Something had gone wrong. Then he leaped back, his jaw dropping.

The chair had reappeared!

As suddenly as it had vanished, it appeared again, moving swiftly through the air toward him as if thrown, then crashing to the stage at his feet.

The Great Cardante stared. It was the same chair, but strangely altered. Now it looked like a Rube Goldberg chair or something seen in the distorting mirrors of a Coney Island Hall of Thrills. Every part of it seemed warped, twisted, curved, stretched or shortened –as if it had been made of wax and had started to melt.

The Great Cardante retained his stage presence with an effort. He stared hard at the point where the chair had vanished and then reappeared.

He could just make out—against the black velvet of the hanging drapes but out on the open stage—a circle of almost imperceptible glittering light, perhaps four feet across—as if a ring of mica particles stood on rim there, reflecting the spotlights and foots.

It must be a trick Midge and the stagehands had arranged to embarrass him—but almost at once he knew it was no joke. For Midge, mistaking his involuntary gesture of bewilderment for a signal, sent Grock out onto the stage for the next trick.

Grock, the French poodle, did a clown act that never failed to bring down the house. He came bounding out, took one leap, two, turned a back somersault which whirled him against that circle of faintly glittering fairy light—and vanished.

Something cold clutched at the Great Cardante's heart. Fine magician that he was, he sensed an alien force here. He cast a quick glance at Midge Manson. To Midge the dog was like a person, his inseparable companion.

Midge looked frightened now. He could see that something had gone wrong, though he did not know what. He took a step forward and Cardante flung out an arm to intercept him—flung out an arm straight toward that slowly increasing circumference edged in tiny glints of light.

His arm vanished to the elbow!

The audience was quiet, tense. Beside him Terry Jennings felt Gustave Werner leaning forward.

"Terry!" the scientist whispered urgently. "Something—"

He stopped. On stage the Great Cardante had leaped backward like a cat touching a hot stove. As he leaped his arm once more became a complete member.

Cardante swung about to face the assembled scientists and his face was strained.

"Please!" he said. "Something uncanny is happening here. I invite you gentlemen to fathom it. Stage manager! Extinguish all the lights. Perhaps we can see—"

The little murmur that had started through the audience stilled. Abruptly with the sudden darkening of the interior of the theater, the circle of light-glints became plain—a circumference almost eight feet across now.

Its lower edge touched the stage with tiny demon lights that twinkled and glittered like diamond dust. And the space within the outline was no longer black. It was possible to see through it now from the darkened house, as through an open door.

A three-dimensional picture slowly emerged—a land as fantastic as a madman's nightmare!

FRAMED in the circle, like an impressionist picture of chaos itself, was a mountainous landscape. The mountains rose sheer, in granite-toothed ranks that seemed to bend away from the eye, as if they were rubber and were being pulled by force unimaginable. They seemed to stretch away and turn in upon themselves so that the eye, unable to follow them, became confused.

Red light bathed them—a sickly red light from two great dying suns overhead. Purple shadows crept like distorted creatures of indeterminate shape across the rocks, shifting and altering in a witches' dance as the twin suns revolved perceptibly about each other.

In the foreground of this outré landscape were two fantastic manlike creatures. They stood in a flat little valley that seemed to lead straight away from the circular opening on the stage of the Denver Municipal Theatre like a narrow gorge.

Beside them was a maze of strange machinery—a great crystal reflector that pulsed and glowed with shifting golden color imprisoned in quartz coils in front of it—a gigantic condenser taller than a man, on whose top a globe of purple light dimmed and flared with the regular beat of a living heart—a battery of tubes, crystalline cylinders and generators, screaming with a high whine almost lost to human ears.

The two beings stood there, staring straight at the startled audience seated so comfortably in the dark and spacious theater. But it was obvious neither of them was aware of their audience. For they were staring with cold expressionless eyes at a small black figure with a dunce cap strapped to its black head, prancing on two legs in a grotesque dance before them. Grock, the poodle, was doing his act!

The creatures were obviously men—but men bearing the same distorted relationship to men of earth that those mountains bore to earthly hills. They were nearly eight feet tall, slender to the point of emaciation, grotesque by normal standards.

Atop their long necks, so perfectly joined to their bodies as to preclude possibility of masks, were the hairy heads of dogs. Arms, long and sinewy and stringy-muscled, ended in hands which were developed paws.

"Anubises! The dog-headed gods of the Egyptians!" Gustave Werner whispered tensely to Terry Jennings. "As they might have really been."

The two were bareheaded, so that the short, bristly hair on their scalps was visible. But details of their bodies were hidden by swathings of heavy robes that shimmered in faint iridescence, as if radioactive.

There was no trace of expression on the cruel canine faces as they watched Grock. The French poodle was turning somersaults, pausing to yip bravely. Suddenly, though no sign of lip movement was visible, the younger of the two spoke. And like a radio wave the sense of the thought came through the circle and reached the brain of every spectator in the theater.

"We have been successful. Aurac! We have broken through! See, there is a creature of the other world come through our opening unharmed!"

"It is a peculiarly repulsive form of life," the older answered mentally.

"If it represents the height of intellectual advance within this level we are making contact with, even our sentimental Senior Council can have small hesitation in destroying its fellows."

THE younger took from his robes a cameralike object and peered into it. Instantly Grock froze in his tracks, trembling violently but seeming unable to move, as if some unseen power had gripped him.

"Yes," the being announced, "he has enough intelligence to understand rudimentary commands but insufficient to work with tools. But that object which came through our vibration screen and which I threw back was tool-created. There is more intelligent life beyond our opening to be reckoned with."

The older Anubis shrugged contemptuously.

"What matter? What life, however intelligent, can stand before Aurac and his twenty thousand years of knowledge? I have promised to lead our people from the frozen desolation of our world to Zanor into a more suitable habitation. I shall keep my promise if it means extermination of myriad creatures of primary level intellects."

For the first time the younger's doglike face changed. It seemed to pale. A look of apprehension crossed it.

"But what of the Senior Council?" he asked swiftly. "You know the stringent orders against destruction it has ordered. If it but guess our mission—"

"Fool!" Aurac flashed. "Why do you suppose, Teros, I chose this desolate mountain spot? We have broken down the vibration wall between ourselves and the dimension I was seeking. The magic of Aurac's science has bridged the gap between two vibration universes once more.

"We have but to project ahead of us a blast or two from our caloric guns and the entire countryside for many miles will be desolate waste with nothing living left to harm us. Then we need but step through to begin preparations for our civilization."

Triumph glowed in Aurac's eyes.

"What can we do on an exhausted world in an exhausted universe? Of what avail to seek the conquest of other planetary systems as badly off as our own? Our vibration level is exhausting itself. We must seek one higher in the cosmic scale, still young, with a life of millions of radiation years ahead of it. So I have always said and so I have done. It lies before us, beyond that dark circle!"

Straight at the audience of scientists in the Denver Municipal Theater Aurac gestured. A kind of madness seemed to seize him.

"For the second time I have broken through!" he flashed to his assistant. "That is how I knew it could be done. The other time, a few thousand years ago, my apparatus was too crude. Now I am ready. We will sweep clean of all alien life this world I have reached through to and create a paradise for ourselves."

His eyes glared. His mouth moved with frenzy. From his robes he snatched an instrument the size and shape of a vest-pocket flashlight. It glowed with a point of brilliant light. In that instant Grock no longer existed. There was a blinding flash like a meteorite entering the atmosphere, and nothing remained but a depression where the poodle had stood an instant before.

Midge Manson moved now. Until this moment he had stood in fascinated horror, watching. Now he leaped forward.

"Grock!" he cried hoarsely. *"Grock!* The dirty murdering freaks! I'll—"

HIS rush took him past Cardante's outstretched arms, through that circle of glittering light, straight toward the two unhuman men and their array of apparatus.

Midge Manson burst abruptly into the other-world scene like a charging quarterback. His sudden dash took him almost up to the Anubises. Then Aurac calmly lifted a hand. The tiny point of light glowed again —and suddenly Midge Manson was not there. A burst of intense light and he no longer existed. The flareback of heat of his consumption gushed in a hot wave out through the circle and into the great auditorium.

"Ha!" Aurac flashed. "That was a specimen of the higher life, Teros! That is the vermin we have to exterminate. Focus the caloric gun. We'll give the creatures a taste of heat before we step through. It's still opaque beyond our shunt and we'll take no chances. Blast all life for a thousand miles beyond our screen!

"We'll begin now. And the Senior Council can snivel in their beds about the sanctity of alien life."

Coolly Teros, the younger, stepped to the glittering machinery beside them and swung down a bell-shaped cup of shimmering metal, pointed the flaring mouth of it toward the circle of darkness beyond which sat every scientist of note in the world. In that instant the world tottered on the brink of destruction, hung suspended on the lip of a chasm of death. No hand, no mind anywhere among those great brains could save it.

"An atomic disintegrator!" gasped Gustave Werner.

And that, too, was a part of Fate's little jest.

In the instant before Teros' hand fell the Great Cardante moved. He had certain abilities. And he knew how to use them.

On the table beside him were his rifles and revolvers—the paraphernalia of his marksmanship act. One stride took him to them. He snatched up a rifle and aimed at that terrible circular opening into the other world. His figure as he stood there was silhouetted against the reddish light from the world beyond him.

The Great Cardante sighted his weapon—fired.

And in his own world the Anubis, Aurac, fell, writhing horribly before he lay still on the cold rock.

Cardante fired again. And the assistant, Teros, clutched at his chest, a wide unbelieving stare in his eyes, blood spurting between his many fingers.

As he fell his body toppled across the bell-shaped heat gun. It spun upward. The intensity of light that must have lived within its flaring mouth was lost to those watching scientists but its effects were plain.

Something seemed to sweep across the distorted mountains in the background like a finger of doom. Rock ran like molten steel. A saw-toothed ridge miles distant bent inward, swayed and toppled into an abysmal gulf.

The lancing fan of force swept past the cliffs in the background, turning them into

hissing steam. Raging volcanic liquid poured down in a mad tidal wave, straight for the opening which gave upon the interior of the Denver Municipal Theater and all the assembled members of the International Scientific Congress.

Someone screamed shrilly. A giant wall of molten rock reared up, surged toward the circular spot, flung out streamers of hissing liquid toward it.

Then, just before reaching the opening, the edges of the catastrophic wave engulfed the shimmering machinery and the bodies of Aurac and Teros. In that instant, before doom could pour out through the hellish doorway between two worlds, the doorway was no longer there. It had been blotted out with the apparatus that had created it.

WITHIN the theater the lights came on again. And Gustave Werner, his fingers gripping Terry Jennings' knee until it seemed they would bite through to the bone, said, "Terry! That was real—*real!* I've got to speak to that man Cardante!"

The Great Cardante reeled backward into the wings, the smoking rifle still clutched in his hand, unable to find his voice. None of those backstage had seen what the audience had seen. Beckhardt, the publicity man, who had been out in front, came rushing up to him first.

"Boy!" he cried, pumping the magician's hand. "Cardante, you were great! You wowed 'em—panicked 'em! All the reporters saw it. How'd you ever think of it? A takeoff on the big argument of today's meeting.

"You've got those science guys out there walking back on their heels. The reporters are on their way back to interview you. You'll be world famous. Headlines like 'They Understand Einstein, but Cardante Baffles Them.' You're made, Cardante, you're made!"

The Great Cardante stared at him dazedly. "That—that was no illusion," he gasped finally.

"Shh!" Beckhardt cautioned. "It's the wrong angle. Won't go. Just make the press boys sore. Tell 'em the truth. Tell 'em how you arranged it specially for this performance. If you want to get the right publicity, be world-famous overnight, that's the tack you got to take."

"Tell them—it was one of my illusions?" Cardante faltered.

"You don't think you can make them believe anything ridiculous, do you?" snorted the publicity man. "Here comes Werner, the big bug of the meeting. Don't forget now!"

GUSTAVE WERNER, his eyes ablaze with excitement, fought his way through to the Great Cardante.

"Man!" he cried. "That was a real dimentional eddy, wasn't it? *Wasn't it!* Quickly! Can't you answer? I must know, I *must!* It's a matter of unbelievable importance. Have you any idea how it occurred—beyond what their thought waves told us?"

The Great Cardante gulped twice before he could answer. Then, quietly, he spoke. He couldn't try to make a monkey out of this eminent man.

"No, it wasn't real," he said with a wavering smile. "It—it was an illusion I prepared for the performance. I hope you liked it."

And so Fate had her little joke. For months thereafter Terry Jennings would catch Gustave Werner mumbling to himself at times, staring doubtfully at nothing at all, shaking his head a little.

But in the end Terry managed to laugh him out of his notion that the Great Cardante could have been lying that night. It was too ridiculous.

Wasn't the Great Cardante one of the world's master illusionists?

So presently Gustave Werner turned his attention to other things and his ponderous report gathered dust and was forgotten. And the world went ahead with her disarming until no weapon of death was left anywhere, save in the hands of police and sportsmen.

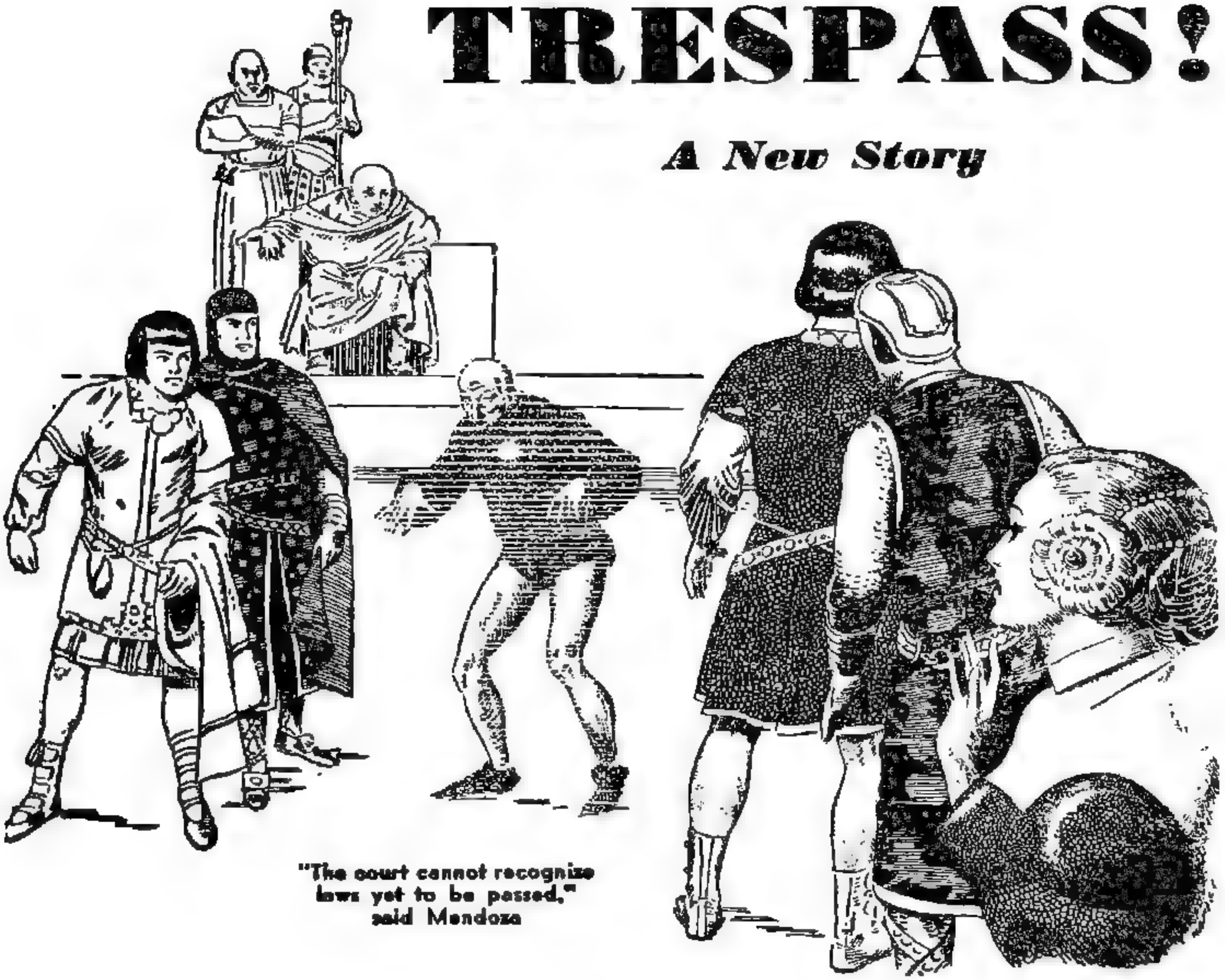
Nor was that quite the end of the jest. For the fame and fortune that the Great Cardante had been promised by his press-agent did not materialize. His audiences everywhere wanted to see the exciting illusion that had made him internationally famous overnight.

When he could not give it to them they abandoned him in anger. They said that his assistant, Midge Manson, was the creator of all the Great Cardante's illusions, that he had run out on his master.

And in a way that's exactly what had happened.

TRESPASS!

A New Story



"The court cannot recognize laws yet to be passed," said Mendoza

When caught in a Timeproofing field, traveler Pedro O'Brian Rubinsky throws the 21st Century into an extra-legal uproar!

By POUL ANDERSON and GORDON DICKSON

THE banquet was a great success. It was held on the top floor of the main building of Pan-American Securities, Inc., the one in Mexico City. That highest level was not for offices or vaults, but for entertainments such as this, which somehow led to more important results than all that went on in the purely business levels.

At the head of the table sat Leonard Figsbee, president of Pan-American Securities, Inc. Flanking him were his vice-presidents. At the foot of the table sat Thomas Weinholter, president of Timeproofing, Inc. Flanking him were *his* vice-presidents. The eating was over and the time for toasts and ceremonies had arrived.

Leonard Figsbee lifted himself heavily and augustly to his feet. A gold button was on the table before him. In a solemn hush, he pushed it, activating

the timeproofing generators in the vaults far below him.

"Gentlemen," he said, lifting his glass, "to the finest vaults in the world, proof now against time itself. Our vaults, gentlemen."

They drank. Thomas Weinholter beamed. Figsbee smiled. The vice-presidents cheered discreetly.

"Gentlemen," Figsbee continued when the careful uproar had died away, "gentlemen, we have today made history—"

There was a slight interruption. A minor employee of Pan-American Securities, Inc., burst through the door and squeaked something. A couple of vice-presidents firmly put him out. There were noises from the hall into which they disappeared.

"As I was saying, gentlemen," Figsbee continued, letting his voice soar grandly to cover the muted tumult beyond the door, "we have today made history—"

One of the two vice-presidents reappeared. With a distraught face which drew disapproving frowns from the other vice-presidents, he dashed up to the table and whispered in Figsbee's ear. The president's face turned pink.

"What?" he rumbled.

The vice-president whispered again.

Figsbee's face turned purple. His eye ranged down the table like an avenging angel and stabbed the eye of Thomas Weinholter.

"What is it, L. F.?" asked Weinholter concernedly.

"Timeproof!" snarled Figsbee. "Hah!"

"Timeproof, hah?" echoed Weinholter, puzzled.

"Timeproof, bah!—if you like that better," barked Figsbee. His voice rose to what from anyone but a full-fledged president would have been a scream. "There's a time traveler in the main vault right now!"

Weinholter rose ominously to his feet. "L.F.," he began, his voice trembling with suppressed emotion, "L.F., if this is a joke—"

"Come and see!" roared Figsbee, tossing his arms in the air.

LIKE a mad bull, he burst through his surrounding vice-presidents, charged down the room and out the door. Weinholter was close behind him. Breathing anathema, the two presidents, one behind the other, proceeded at full rocket down the corridor to the elevators. The vice-presidents tactfully took another cage, but the two chiefs did not speak to each other all the way down to the third sublevel.

They burst out to confront the massive entrance to the huge main vault. The door was open. A horde of guards, janitors, technicians, and other lesser beings milled before it. Through the entrance could be discerned a spindly little gray man in curiously shimmering white clothes. The time traveler was there all right.

So was an Aztec temple.

Weinholter did not take in that fact at once. He whirled on his chief engineer and gobbled in lieu of coherent phrases. The engineer, an amiable, chunky young man by the name of Pieter van Tuyl, waited for the storm to subside.

Then he said mildly, "The timeproofing field is working perfectly, chief. But the minute it went on, this traveler appeared. Obviously—"

Weinholter did not wait for the rest, obvious or otherwise. He knew only that his service to his greatest customer to date, perhaps the most important customer in the Pan-American Federation, had flopped. Utterly. He joined Figsbee in pouring the vials of wrath on the head of the little stranger.

The man was getting over his own bewilderment. Comprehension lit his sharp eyes, followed by indignation and resolution in that order. As the others crowded close to him, his beaky nose wrinkled disgustedly. He drew a small capsule from an inner pocket, held it under his nostrils, and broke it.

The scent that billowed out was revolting, a combination of sickly-sweet skunk and decadent Limburger. Figsbee and Weinholter backed up, gasping. The stranger's eyes swept the circle, and he said very harshly and distinctly: "Vo kronjar es-jor ae crulzak debravu ik?"

"Huh?" asked Figsbee. Then, remembering he was the president of Pan-American Securities, Inc., he changed it to: "Who are you, and what is the meaning of this outrage?"

"Oh— Anglic." The little man nodded grimly. "You have not the Semantikon—in'national auxispeech yet, no? Then what barbaric year be it now?"

"Why—" For a moment, Van Tuyl couldn't remember, then— "Why, this is 2012 A.D.—"

"Silence!" roared Weinholter. "I'll deal with you later, you incompetent, blundering—" He turned on the time traveler. "It is 2012 A.D."

"Oh, no!" The little man slapped his forehead in dismay. "Not the Dark Ages!"

"What? Why, you— Who are you, anyway?" roared Figsbee. "What do you mean, sir, materializing in the main vault of the home-office building of Pan-American Securities, Inc? And with that great monster too." He waved at the Aztec temple. "Take it out, sir, this instant!"

Van Tuyl became, for the first time, really aware of the structure which had appeared. It was small of its kind, a teocalli surmounting a pyramid of earth and logs, up which ran stone steps to the summit. It was also practically new, its stone snakes and other ornamentation gaudy with paint and feather-weavings. But it filled the great vault completely. There were hardly six inches on a side and the roof of the teocalli scraped the steel ceiling. The vault was absolutely blocked off by its squat bulk.

The fantastic explanation hit the engineer like a physical blow. He tried to suppress his laughter. His job was probably gone anyway and—

"Now look," said the time traveler in a maddeningly condescending tone. "Let we be reasoners and straight this out. I come from—let I see—by your chron, 2974 A.D."

"But—that's impossible!" gasped Weinholter. "The timeproofing field makes it impossible!"

"Canst thou not get it through thy thick skull that this be obviously possible, sith it hath verily happened?" screamed the traveler.

"Huh?" muttered someone.

"I be—are—am trying to talkest archaic Anglic— Englishk—for the benefit of the Dark Age mind, O ye fools," said the traveler. "Eke verily, ye be semantically maladjusted simpletons!"

"We aren't quite that archaic," said Van Tuyl. He pushed forward. What the devil, he'd be fired anyway and if somebody didn't take charge this madhouse wouldn't adjourn till the end of the week. "Now look, I think we can straighten this out, Mister—ah—" he paused.

So did the traveler.

AN embarrassed minute went by. Then the engineer said, "What's your name, please? I'm Pete Van Tuyl—" He held out his hand.

The traveler jumped back a foot and broke another scent capsule. His voice quivered.

"Do you still practice—flesh touching?"

"Not if you don't want to," said Van Tuyl quickly. "But—"

"I be named Pedro O'Brian Rubinsky, 738-A-42973. And I demand to know the meaning of this illegal interference with my lawful occupation!"

"There's nothing illegal—"

"Oh, so no? Wait till I file all my criticisms against you. Just wait! Illegal barriers, restraint, threat, social offense, atavistic practice—you will be optimum to get off with psychorevision."

"Now—cool down, Mr., ah, Rubinsky. Take it easy. Timeproofing may be illegal in your time, but it isn't now. In fact, it's the greatest aid to law and order since the invention of police forces." Van Tuyl cast a side glance at Weinholter to see how the boss was taking all this. Then he resumed: "You can't have come from the future at this site. The barrier stops time travel in either direction."

"No." Rubinsky was a little calmer now. "I comed from about 3.7 kilometers east-by-northeast, I think. At any viewpoint, I goed back to year—let I see,

now—you willed say 1463 A.D. I wandered about the Aztec city of that time, looking for specimens— I be classed as archeologist. Finding this temple, which beed exactly what I beed looking for, I setted up my time projector to carry it and Iself back to my own time. And instead I materialized here. *Here!*" He had an eloquent snort.

"I see. That's about what I thought." Van Tuyl rubbed his chin. "Hmmm—that makes it pretty awkward too, doesn't it?"

"Not at all," said Rubinsky acidly. "An ye but turn off thy pestiferous timeproofing field, I canst resumest— Oh, fout! Turn it off and let I get out of here!"

"Yes, yes," said Figsbee impatiently. "Turn it off, man, let him take that—that monstrosity out of here, then turn the field back on and let us resume our ceremonies." He was trying to recall the speech he had been making. It'd been a good one, too. His private secretary had worked three days on it.

"I'm—afraid—that can't be done," said Weinholter slowly. "Not if—" He performed the difficult feat of casting a glance at Van Tuyl which the engineer should interpret as appealing and everyone else as stonily condemnatory. "Have you any suggestions to remedy this unfortunate situation, *Mister* Van Tuyl?"

The "Mister" was a bad sign. Usually, in the presence of clients, it was "Dr. Van Tuyl." Oh, well. The engineer turned back to the archeologist.

"I think—" he began, in what he hoped was an ingratiating manner.

"You cannot, so do not try," snapped Rubinsky. "Give I the facts and I will do the thinking. Why be this barrier here?"

"Well—" Van Tuyl took a deep breath. Catching a whiff of Rubinsky's perfume, he wished he hadn't. "Well—you see, Dr. Rubinsky—"

"Be you insulting I? I be no meditech. I be classed scientist."

You be classed an obstreperous old goat, thought Van Tuyl. But he said smoothly enough, "Pardon me, Scientist Rubinsky. You see, the time projector was invented about five years ago. As you know, it's a small generator which encloses a given body in a field whose size and dimensions can be varied at will. As long as the field is on, whatever is contained within it travels along the time line—backward or forward depending on the sign of the field."

"I be not altogether maladjusted," said Rubinsky coldly. "Or take you I for Dark Age mentality similar to your own?"

Van Tuyl bit back some words ordinarily reserved for lab technicians and went on: "Of course. At any rate, the projector is still limited in range and capacity. We haven't gone far into the past or future, or carried much mass—I think fifty years is the current record. But the time projector is unfortunately quite simple to build, and the details of its construction are generally known. The result was, of course, a crime wave which almost swamped the law. A burglar need only go back to the site of, say, a bank vault before it was built, then project himself up to the present, loot it, carry his spoils back to the past, go to some other point in space, and return to the present. Or—"

RUBINSKY gaped at him, horrified. "You mean such social maladjustments still exist?" he breathed. "Minds exist which *want* to steal? No psychoconditioning—not even corrective revision of personalities?"

"I'm afraid not. Only an elaborate and costly system of alarms, permanent guards, and the like could make any place safe until the timeproofing field was invented two years ago and Mister Weinholter founded Timeproofing, Inc." Van Tuyl gestured respectfully at the great man. Rubinsky gave him a distasteful look and disappeared.

He reappeared after a confused few seconds. "Go on," he said.

"But—you—"

"Yes? I doed not wish to look overlong at that maladjusted self-titillator who be responsible for this," said Rubinsky coldly.

"Why, you—" Weinholter made a

lunge. Rubinsky disappeared again during the confusion.

When he re-emerged, things had calmed down a little. "Proceed," he said to Van Tuyl.

"But—what—how did you—"

"Mechanics of spatial displacement willed not interest you. Go on with the explanation. And it had gooder be good!" Rubinsky snorted again.

"Well—" Van Tuyl groped helplessly for words. He had a feeling of complete unreality, as if he had fallen down Alice's rabbit hole. He thought wistfully that he might wake up any minute.

"Well," he said, "an object traveling in time is of course to all appearances non-existent in the interval it traverses. But it can be affected by a field of similar nature to the projective force, one which heterodynes that force, causing the projector to become inoperative. In short, Timeproofing, Inc., creates a field which exists in a certain region of space—this bank vault, for instance. And it exists for *as long* as it is turned on. You thus have a chunk of space-time which no time traveler can enter. If he tries to do so from the past, as you did, his machine comes to a dead halt and he must live in normal time, in that space volume, until the field is turned off. If he tries to do so from the future, his machine again stops at the 'edge' of the barrier—he cannot exist in the protected region of space-time at all.

"That—that's all there is to it, I guess. As long as one of our fields is on, this vault is safe from time travelers. Even if we turned it off now, no one could enter the vault via time travel in the interval between the field's being switched on—when you appeared—and its being turned off."

"I—see—" said Rubinsky, and slowly began to turn a turkey-cock red.

"Enough of this," puffed Figsbee. "Turn the field off, let this intruder go, and—" He paused.

"I'm afraid that won't do, sir," said Van Tuyl sadly. "In order for him to return to his own era in this vault—or the region of space it occupies, since obviously the vault doesn't exist in his own age—well, in order for him to return, the timeproofing field will have to be turned off permanently! Which will leave the vault as much at the mercy of time burglars as before."

Rubinsky exploded. "Turn it off, then!" he screamed. He hopped up and down, shaking his fists like an angry gnome. "Turn it off, smash the accursed barrier machine, and let me proceed on mine lawful errand or 'fore Heaven, knave, I willest— *Turn it off!*"

Weinholter burst into all the fury of a man losing his fattest fees. "Get out!" he shouted. "Take your confounded temple out of here and project it into your blasted future—but take it out of this vault!"

"It's too big," said Van Tuyl. "Unless we demolish it—"

"No!" bellowed Rubinsky. It was surprising how full-throated a roar he had. "No, you vashtring winklers, you geep-faced nanks, you treacherous, lecherous, kindless villains!" He sprang up on a step of the pyramid. "This be priceless archeological treasure. Over my dead body—"

"That," said Weinholter g r i m l y, "could be arranged."

"I file a complaint—challenge—legalism—whatever the term is!" shouted Rubinsky. "I charge you with unlawful interference with time traffic, restraint, threat and menace, maladjustment, contempt of science, assault and battery, arson, murder—"

"I file suit too!" roared Figsbee. His jowls quivered with the violence of his voice. "Trespass, interference with business, libel, damages—"

The crowd became a mob. The stone snakes leered complacently over the riot.

VAN TUYL went over to the hotel where Rubinsky had taken a room—what he used to pay for it, the engineer never did find out—to get him for the trial. The last couple of days had been hectic for everyone concerned, and at the thought of the impending courtroom scene Van Tuyl shuddered.

But—well—he's an irritating old jorp, sure, but he's so completely alone

in this age, he's trying to fight the whole world in defense of his beloved temple. My job's probably gone anyway, so it won't matter if I show him a little friendship. Van Tuyl was enjoying his own magnanimity, when it occurred to him that anyone who did befriend Rubinsky, rather than completely antagonize him as Figsbee and Weinholter had done, might be able to get together with him and work out a solution of this whole mess. Which would rescue Van Tuyl's job.

The thought was cheering, but in a way the engineer regretted having had it. He didn't know why, but his subconscious mind did—he had felt so much nobler when his motive had been completely unselfish.

He knocked on the door of Rubinsky's room. The archeologist snarled something which he took to be an invitation, and he let himself in. Rubinsky sat among a heap of papers, scribbling furiously. He favored the engineer with a sour glance.

"Completely barbarous period," he grumbled. "No identity plates—how doed I know who you beed? Not even a means of disintegrating unwelcome guests."

"Huh?" gaped Van Tuyl. "And you call *us* barbaric!"

"Indeed so. The Aztecs haved much gooder manners. But they beed conditioned to have such. You be not, and you—" Rubinsky spread his hands helplessly. "What kind of hog wallow be this culture of yours, that it do not even provide penalties for being boring?"

"At least your temple is still safe," said Van Tuyl stiffly. "There's a police guard over it until the court settles this dispute."

"I be glad of that, of course, though I cannot see why it beed doed."

"Well, the local authorities are all Mexican—that is, living in this part of the Federation. They're proud enough of their Aztec heritage not to want to destroy such a relic without thinking twice. And, of course, the whole situation is completely unprecedented." Van Tuyl shrugged. "But I don't see how it can be avoided eventually. That vault's important—lots of valuables, documents, and whatnot blocked off by your pyramid. And Figsbee swings a lot of weight."

"That he do," agreed Rubinsky, a little puzzled. "But what do the size of his belly have to do with it?"

"Never mind. I've come to take you to the courthouse. The trial starts in half an hour."

"Oh—oh, yes, I haved forgetted. I beed very busy in the last couple of days. All those news gatherers—have you no respect for privacy? And psychotechnics—no, lawyers." Rubinsky shuffled his papers together. "Also, I haved beed busy gathering observations on Dark Age culture."

"Why—couldn't time travelers do so as a matter of course?"

"Who cares about these dreary centuries? Time machines be expensive, man, they be used in archeology and paleontology only. Willed you, if you haved a time machine, rather visit Ostrogothic Italy than Periclean Athens?"

Van Tuyl swallowed the unflattering question without answer. He countered: "Why're you studying this period, then?"

"As long as I have to stay here, I may as well make a few observations. I will write a tape—a book, you willed say—about it which may become popular." Rubinsky looked lovingly down at his scrawlings. "It will be lurid enough. Why, this age still haves unregulated sexual intercourse, and you throw men in cages for minor offenses instead of psychorevising— Tell me, what do you think of the title 'I Beed a Prisoner of the Twenty-First Century'?"

"I don't," snapped Van Tuyl, and led the way out of the room. He was beginning to regret his decision. Rubinsky's perfume was r e a l l y overpowering. Though you couldn't expect a man of another age to like odors which the present was so used to that it wasn't even aware of them. They got a cab and drove toward the courthouse.

"You're lucky you didn't land a century earlier," said Van Tuyl. "Legal pro-

cedure was thoroughly overhauled when the Federation was formed. Even so tangled a case as this will be treated quickly and relatively informally. But are you sure you want to plead your own case?"

"I be," said Rubinsky stiffly. "I can think much more logically than any Dark Age law-interpreter."

Van Tuyl shrugged. To change the subject, he asked curiously, "Just when was the time machine improved to the point where it began to approach the range and mass-capacity of yours? Even fifty years in the future, we found no improvement. We couldn't go any further, because beyond that time there are laws for the arrest of all time travelers out of the past and their deportation back to their own time."

"That beed when it beed realized that such a law be necessary to progress," said Rubinsky. At Van Tuyl's blank look, he explained: "Suppose progress haved beed made, then a time traveler from the past could get the improved designs, carry them back to his own time, and give them to scientists—which willed cancel all the long period of invention which haved produced the improvements. Which willed violate causal laws."

"But look—how do these causal laws know about the purely human deportation laws? How could it be that no ideas for improvements occurred to anybody until after those laws had been passed? It—doesn't make sense!"

"Surely you do not assume that causality works only from past to future," said Rubinsky. "Future to past be just as valid."

"But—but— Oh, Lord!" Van Tuyl clutched his head, which seemed to be in some danger of spinning off its neck.

"Your conversation bores I," said Rubinsky, and disappeared. He reappeared when the cab stopped before the court house.

FIGSBEE sat in the front of the trial chamber, surrounded by lawyers. He looked plumply ominous. Weinholter, also enclosed in lawyers, sat at the other side of the room. Van Tuyl entered in Rubinsky's wake and sat near him, wishing he could disappear too. The place buzzed with reporters and spectators.

The judge came in. Van Tuyl recognized him— Mendoza, a competent and fair-minded man, about the luckiest one for Rubinsky who could have been picked. But the archeologist let out an indignant scream.

"Be *that* the judge?" he shouted.

"Order!" cried a bailiff.

"I demand justice!" bellowed Rubinsky. "I demand a robot judge. Who ever heared of a human judging between humans?"

"Pipe down," muttered Van Tuyl frantically. "Robot judges haven't been invented yet."

"A human judge!" Disgust quivered in Rubinsky's voice. He looked more closely, almost hopefully, at Mendoza. "That is—you be human? Be you really a man?"

"That will do," choked the judge. "I recognize you are from a period with different mores, but if you do not sit down I will hold you in contempt of court."

"I have nothing but contempt for this court," snarled Rubinsky and slumped back in his seat. Mendoza purpled, but pretended not to have heard.

"What the heck is the idea, asking the judge if he's really human?" whispered Van Tuyl furiously.

"Well— I haved some hope he may have beed a humanoid, say a Capellan or Centaurian." Rubinsky slumped further back. "No such luck, though. He be human. And how can any being judge impartially between members of his own species?" He belched loudly.

"Order!" roared the bailiff. Mendoza slammed his gavel with an air suggesting he wished Rubinsky's skull were under it.

Silence came. The judge picked up his papers and read, "The case of Pan-American Securities, Inc., and Timeproofing, Inc., versus . . . The case of Pedro O'Brian Rubinsky versus Pan-American—" It was a little hard to follow, but one gathered that Rubinsky had

filed suit against Pan-American and Timeproofing, charging them with interference with his business, threat to property of scientific value, menace and then a whole list of weird charges: atavism, contempt of science, maladjustment, inurbanity, direction of semantic inaccuracies at a specific person. . . . The two corporations had filed countersuits charging Rubinsky with trespass, interference with business, libel, slander, damages of several other kinds—Van Tuyl quit trying to follow the accusations. There were just too many.

Under the present legal setup, the two suits and the various charges would be taken care of in one bundle and an attempt at mutually satisfactory compromise, consistent with the law, worked out—if possible. But Van Tuyl glumly doubted the possibility.

Mendoza looked down at Rubinsky. "Several of your charges are highly irregular," he said. "Atavism, contempt of science, and the rest are not actionable. There isn't even a legal definition for most of it."

"There be in my time," said the archeologist.

Van Tuyl tugged frantically at the little man's sleeve and hissed, "Address the judge as 'your honor'."

"Why?" asked Rubinsky stonily. "I do not honor him."

"Do you want to lose this case right away?"

"Oh, very well." Rubinsky turned back to the judge. "Your honor, I be under jurisdiction of laws in my time."

"The court cannot recognize laws yet to be passed," said Mendoza.

"But surely," cried Rubinsky, "surely your honor can see, if your honor be not a semantically incompetent fool, that laws in my time be so much more logical than laws of your honor's time that anybody but a cerebrally paralyzed nank like your honor willed—"

"ORDER!" screamed Mendoza.

Figsbee's lawyer stepped forth. "If it please the court," he said, "we wish to contend that a time traveler from the future, having not been born or even conceived as yet, is not legally a person and has no legal rights whatsoever." He snickered. "Unless the laws against cruelty to animals apply. Certainly he cannot sue—"

Rubinsky leaped to his feet. His face was brilliant red. "That be insult!" he yelled. "I can sue just as well as any normal individual, and if—" He went on in a vein suggesting that "sue" had a different meaning in his own time.

"ORDER! ORDER IN THE COURT! ORDER!!!"

When some semblance thereof had been restored, the Pan-American lawyer began to press his point again. For a moment Van Tuyl thought it was all up—certainly Mendoza would have liked little better than to squelch Rubinsky—but in the end the judge shook his head.

"I am afraid I cannot allow that," he said. "While no transtemporal suits have yet occurred, the present case suggests that they may. And if such disputes are to be settled by legal means at all, the contestants must be mutually recognized as persons. Overruled."

THE lawyer shrugged, with an air of not having expected it to work and not being particularly concerned by the failure.

"Your honor," he said, "it is not merely the business of my client, Pan-American Securities, Inc., which is suffering from this interference. The vault in question contains articles of great value, essential records and documents, needed by thousands of people and firms. Surely it is not the intention of this court to paralyze the business of the city—perhaps of the Federation."

"No vault be that important!" shouted Rubinsky. "Your honor, I charge that law-interpreter with wilful exaggeration, your honor."

"Overruled!" said Mendoza grimly.

"But your honor cannot overrule logic, unless your honor be even more stupid and maladjusted than—"

"Order!"

"Anyway," said Rubinsky, "I be not staying here for fun of it, your honor. I want to leave just as much as these geeps want me to. If they will only turn

off their timeproofing field, I will take the temple away at once."

Weinholter's lawyer surged forth. "Your honor, that proposal is highly irregular," he said. "It would not only interfere with the business of my client, Timeproofing, Inc., causing a great loss in money and prestige, but would require return to the old system of twenty-four hour guards in the vault, increasing the cost of operations for Pan-American Securities and therefore the charges for the use of said vault."

"That be no concern of I," snapped Rubinsky. "Suppose, your honor, that I beed driving along one of your crude highways and a woodcutter chopped down a tree so it falled across the road and maked I stop. It might be his business, and if I tried to make him remove the tree he might say I beed interfering with his business. So I be, perhaps, but he be making the greater interference by halting my passage. In my time, your honor, it be illegal to put up time barriers and interfere with temporal traffic except in dully designated and restricted areas."

Van Tuyl let go a silent cheer, because the speech had plainly told on Mendoza. The judge paused, frowning thoughtfully. At least he saw that Rubinsky wasn't being stubborn out of pure cussedness.

"Of course, in my time stealing be unknown, so time barriers not so needful," went on Rubinsky persuasively. "But even today you appreciate science. Willed you desecrate noble monuments of past civilization, ruin them beyond hope of repair, for the abstract money symbol?"

That was another telling point. Mendoza's ancestors must have been largely Aztec. Van Tuyl began to have a faint hope. Then he realized sickeningly that if Rubinsky did win the case, after the engineer had sat by him and coached him, it was definitely goodbye to his job —and probably to any other job where Weinholter's vengeful influence reached —and Figsbee's! Between them, they could make the Federation just about uninhabitable for Pieter Van Tuyl.

"The points are well taken," said Mendoza. "This court is not altogether blind to scientific and esthetic values. And in the matter of interference with lawful time traffic—there is no real precedent, particularly since neither party deliberately sought to interfere with the other, but it seems that—" His voice trailed thoughtfully off.

"Objection, your honor!" screamed Weinholter's lawyer. "There is no analogy between temporal and spatial traffic. And it has been proven, in the case of—"

"Your honor, use that hammer on this maladjusted grulfik!" yelled Rubinsky.

"Order!" shouted Mendoza. "Any further interference and you will be held in contempt!"

"Why should I care for the opinion of Dark Age cretins?" said Rubinsky. "It be plain your honor be a slow-witted gastacoid, and logic and justice be equally absent from this so-called court." He belched again.

"That belch did it," snarled Mendoza. "I sentence—"

"It relieved my stomach," said Rubinsky. "But do not tell me you still have natural-function taboos?" He looked shocked.

"Common courtesy, to say nothing of the rules of legal—"

"No wonder people died early in the Dark Ages!" Rubinsky whipped out his notebook. "I must record this for my tape—it be incredible."

"Bailiff," yelled Mendoza, "arrest—"

"I see no further reason to remain in the presence of creatures barely removed from the ape," said Rubinsky, and disappeared.

Van Tuyl tried to edge out of the pandemoniac courtroom. He felt vaguely ill. A familiar roar stopped him, and he turned to face Judgment in the shape of Thomas Weinholter. Behind him came Figsbee, breathing vengeance.

"You traitor," said Weinholter. "You—"

"Turncoat," supplied Figsbee helpfully.

"Thanks. Turncoat! You're fired—permanently! And I'll see that no other employer is ever inflicted with you."

"Look, chief," pleaded Van Tuyl. "I was only trying to get on the right side of him, in the hope of working out a better solution. Anyway, he's lost his case."

"I should hope so!" puffed Figsbee. "But that won't move that monstrosity in the vault. It will take a week at least, and c o s t thousands—thousands—to clear it out!"

"But—" Van Tuyl groped for breath. And inspiration came.

IT wasn't the conventional blinding flash. It was merely a dim feeling that, after all, he had nothing to lose no matter what he tried.

"Look, chief," he said, "I may be able to get that temple out of the vault in a few minutes, with no cost to anyone. I'm willing to try, anyway."

"You—what on earth—" Figsbee gaped at him. So did Weinholter.

Van Tuyl knew full well that if he explained his scheme it would be promptly vetoed. He said, with the words stumbling over each other in their hurry, "Give me an hour. I'll be back—I hope!" Then he turned and ran out of the courtroom.

He caught a taxi and yelled an order to get to the Pan-American building immediately, if not sooner. Amalgamation with the other Americas had not changed the Mexican driver, and Van Tuyl thought vaguely that the cab hardly needed wheels, since it didn't seem to touch the ground except at odd moments. When they pulled up, he was glad enough to be alive without regard to his job.

He tumbled out and clattered down into the vault. The police guard was still there, not having received orders from the court yet. So, as the engineer had expected, was Rubinsky. The archeologist was taking a massive metal-and-plastic device which must be his time transporter out of the teocalli. His lip was trembling, and a tear glittered on his furrowed cheek.

He looked down at Van Tuyl, who came up the pyramid three steps at a time. "I have losed," he said dully. "Never mind, I will take my projector out of here and return to Aztec Mexico." He sighed heart-rendingly. "But I do not expect to find so perfect a specimen again."

"Look," gasped Van Tuyl. "Quick! I think we may be able to save your temple yet!"

"But how?"

"How much capacity has your projector got?"

"Why—quite large. Much larger than I have finded needful."

"Do you think it could carry this whole building into the future?"

"Why, yes." Rubinsky's eyes lit with sudden comprehension. "Yes, of course!" He looked suddenly chagrined. "And to think a Dark Age mind conceived it!"

"Hurry, hurry! They'll try to stop us if they get here before we've got it set up!"

Van Tuyl helped Rubinsky carry the projector out of the vault. It was almost weightless but its inertia and bulk were awkward. They set it down beside the elevator cages, safely away from barrier fields, and Rubinsky fiddled with the controls.

"I will set up a large spherical projection field, enclosing the entire building," said the archeologist. "And enough of the surrounding grounds so that it will not collapse when we arrive in the future."

An elevator whined to a halt. Weinholter, Figsbee, and a minor horde of lawyers, policemen, and onlookers tumbled out.

"I thought I'd find you here," rasped the chief of Timeproofing. "What crazy plan are you— Stop!"

Rubinsky threw the main switch. "Too late," he said blandly. "This whole building be on way to the future now."

The peculiar inward *thrum* of time travel vibrated in their bodies.

"Stop!" yelled Figsbee. "This is kidnapping! *Stop!*"

Rubinsky stopped, glancing at his gauges. "Here we be," he said cheerfully. "Year 2960 A.D., when this part of the world beed a park just as in my own time fourteen years later."

"But that's impossible!" puffed Figsbee. "Why, this building was built for—for eternity. Yes, for eternity!"

"As you like," said Rubinsky with maddening calm. "But I happen to know that even five hundred years ago, in the twenty-fifth century, no trace of it existed."

Figsbee's hands opened and closed. "Just wait till I catch that contractor," he rumbled. "Just wait!"

Van Tuyl went over to the timeproofing generator for the main vault and cut the field.

"What are you doing?" roared Weinholter. "Officer, arrest this lunatic."

"Look, chief," said Van Tuyl. "It's really very simple. We've gone into the far future, taking the whole building, *including the barriers*, with us. Now Rubinsky can take his temple as much farther as he likes—fourteen years, to be exact. Then he can come back to now, return us to the twenty-first century, and go home. It hasn't cost anyone any time or money, and the whole problem is solved to the satisfaction of all."

"Ummm. Well—" Weinholter subsided, and Figsbee was still too preoccupied with the perfidy of his contractor to know what was going on.

Van Tuyl helped Rubinsky carry the projector back into the vault. On a sudden impulse, he asked, "Take me along, will you?"

"If you like."

RUBINSKY was oozing offensively patronizing amiability. He set his switches and dials and started the projector again. The Aztec temple blinked out of the vault.

"Lucky these machines have ground-level adjustments, or we willed reappear below the surface," commented the archeologist. He stopped the projector, and the grayness became a sunlit park landscape, grass and trees and no sign of buildings. Overhead floated a noiseless bullet-shaped aircraft, and a man and woman were picnicking nearby. They glanced once at the temple as it materialized, then returned to their not-yet-outmoded sandwiches. Time travel, thought Van Tuyl dizzily, must be rather commonplace in 2974 A.D.

"The temple will stand right here," said Rubinsky happily. "After scientists have studied it, it will be left just as it be, a monument to the Aztec nation and the genius of Iself. But now to return."

He reset the machine and the two emerged in the vault, *sans* temple, praise be to Quetzalcoatl! Thereafter it was only a minute's work to return the whole building to 2012. Rubinsky's machine was sufficiently delicate to bring them back to within a microsecond or so of their starting point, which relieved Van Tuyl. He had had visions of coming back to a collapsed basement or something on that order.

Rubinsky took his machine out of the restored barrier field. "And now," he said gaily, "with slight regret in the case of Citizen Van Tuyl, and great joy in the case of all others, I bid this unsanitary century farewell." He and his projector disappeared.

"Thank goodness we're done with him!" exclaimed Figsbee.

"Ah, yes." Weinholter looked benevolently at Van Tuyl. "Yes, indeed. I must say you showed commendable foresight and enterprise in this matter, Doctor Van Tuyl. It is this foresight and enterprise which has made America and American economics great. In view of your, ah, foresight and, ah, enterprise, Dr. Van Tuyl, you may consider yourself reinstated—perhaps at a slight upward adjustment in salary, to be discussed later."

The engineer nodded. He felt too tired to be jubilant. Later on he'd celebrate, but right now he only wanted rest.

One of the onlookers pushed forward. He was a small man with eyes almost as sharp as his nose and voice.

"Mr. Figsbee," he said. "Do I understand that this entire building and all its contents have been forward in time?"

"Yes—all its contents. Including the timeproofing field," said Figsbee. He beamed. "Yes, the Pan-American building has gone nine hundred years into the future. And returned. No other building

(Concluded on page 160)

CHILDREN of the

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CHAPTER 1

Through Jupiter's Clouds

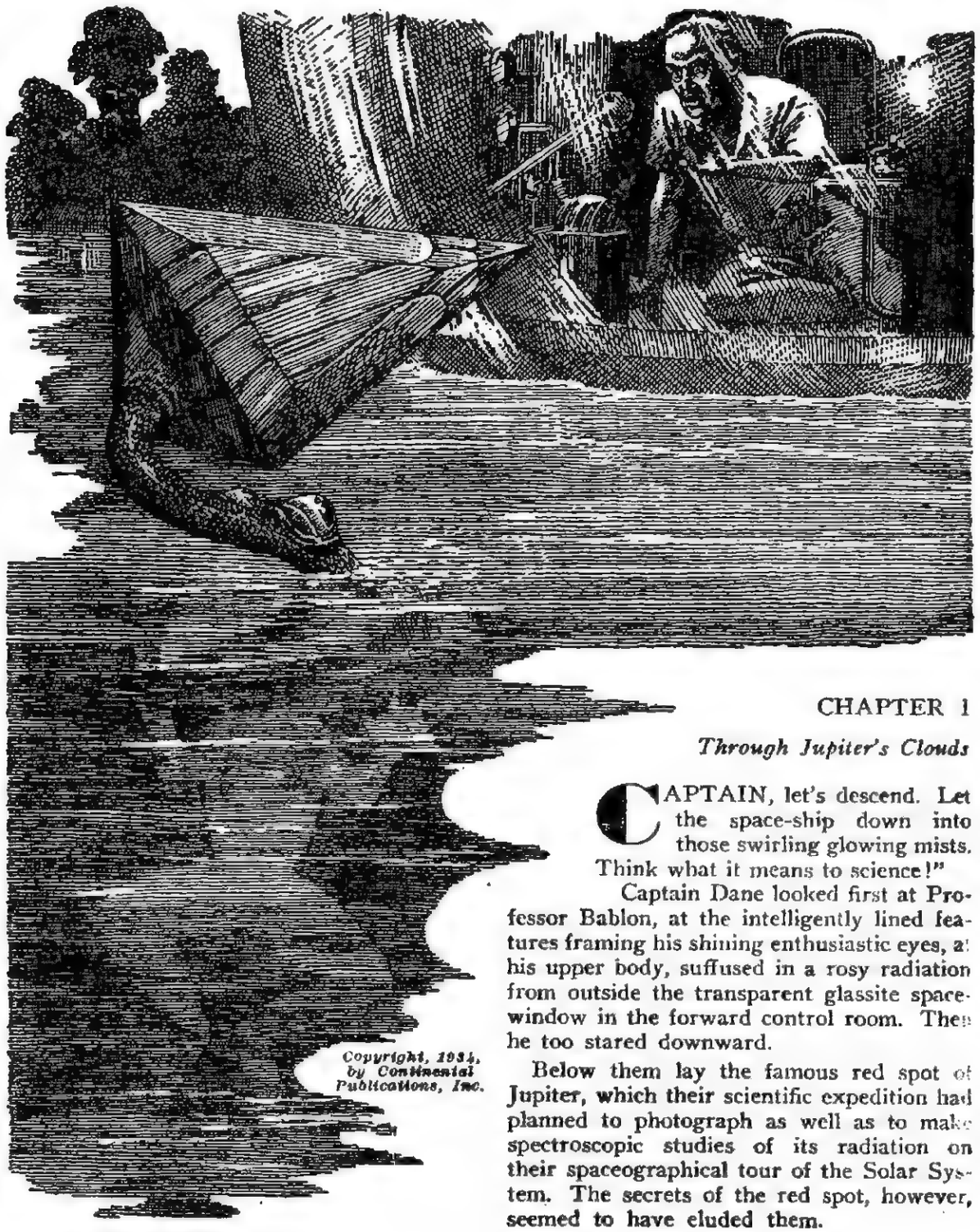
"CAPTAIN, let's descend. Let the space-ship down into those swirling glowing mists. Think what it means to science!"

Captain Dane looked first at Professor Bablon, at the intelligently lined features framing his shining enthusiastic eyes, at his upper body, suffused in a rosy radiation from outside the transparent glassite space-window in the forward control room. Then he too stared downward.

Below them lay the famous red spot of Jupiter, which their scientific expedition had planned to photograph as well as to make spectroscopic studies of its radiation on their spaceographical tour of the Solar System. The secrets of the red spot, however, seemed to have eluded them.

CHILDREN of the RAY

a novelet by
J. HARVEY HAGGARD



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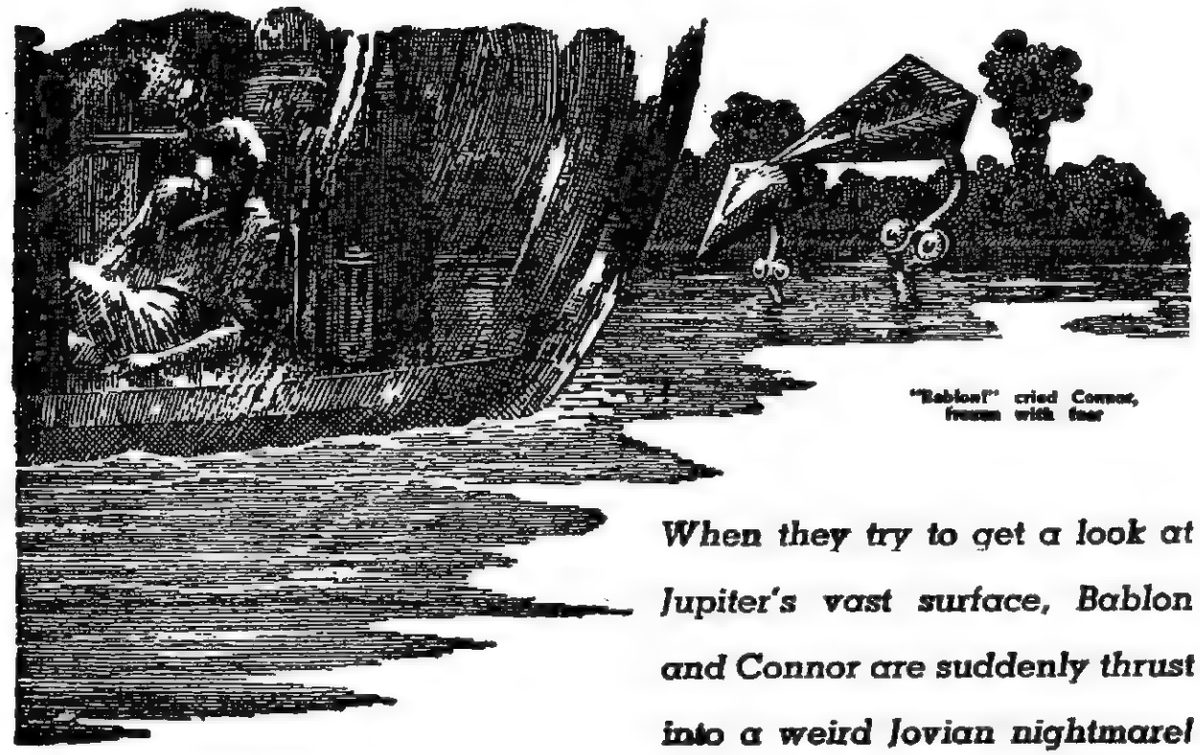

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Upon their arrival at Jupiter and subsequent close scrutiny of the red spot, they had found the entire area covered by high thick clouds through which the crimson radiation suffused. Nothing at all could be seen of the Jovian surface. Captain Dane had the responsibility of the safety of his passengers on his shoulders and he hesitated at risking a descent into the glowing clouds.

Directly below the space-ship lay a sea of fiery mists, pitching and tumbling crimson tongues to the inner mysterious fires of Jupiter's red spot. Above the sky was pitch black. And beneath was only this tumbling expanse of suffused illumination.

Grim sagacity remained written on Captain Dane's harsh, almost Puritanical features. The professor was dedicated to his science. Captain Dane thought of the leviathan torpedo-shaped space-ship, now limned in the upper darkness by the illumination below, green riding-lights gleaming from the dark upper portions of her broad curving body like the multiferous eyes of a marine monster.

He shook his head. "Primarily," he said, "our excursion is devoted to science. But there are a hundred people aboard, including the scientific force and the crew. Down there lies heaven knows what. I owe my men the protection of unbiased judgment. Neither my conscience nor my sailing instructions would permit such a digression."

Professor Bablon radiated disappointment. He peered down into the swirling mists through a spectroscope and his gray eyes lit with excitement. "I'd give my life to define that unknown spectroscopic ray from

RAY

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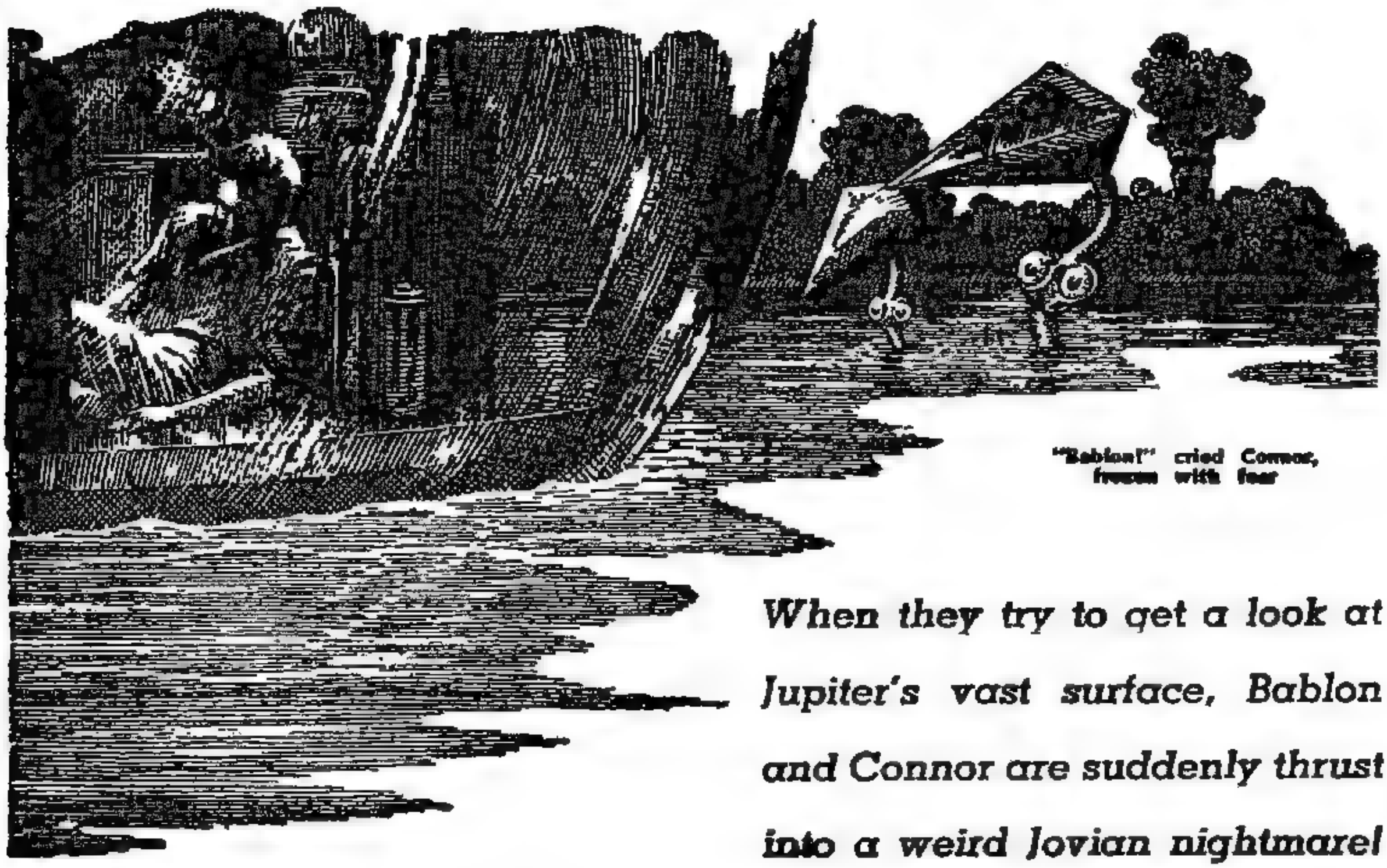

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the red spot," he sighed.

At this a young man in the garb of a ship's officer came forward from the shadows of the control room. There was a suggestion of quiet force and unwasted motion in his deliberate advance. He was young and lithe, his features clear and ingenuous. His blue eyes sparkled with intense interest. He had been watching the spectacle below from a corner of the space-window and had overheard the conversation.

"If I may suggest, sir," he said, saluting the Captain, "there is a way. There is the observation sphere. It could be lowered to study the terrain at closer view, perhaps take photographs, yet in no way endanger the rest of the passengers."

"Great!" cried Bablon, wheeling. A roseate bulb from the control board cast a chance ray upon his features. His hair was turning slightly white.

"But it would take an expert operator as well as Professor Bablon himself," protested Captain Dane.

"I might suggest myself, sir," returned the young man.

"Excellent," cried Bablon. "You can't refuse this, Dane. I beg of you."

"You'd be taking your life into your own hands," said Captain Dane. "Very well, if you persist, Lieutenant Connor."

HE SHOOK hands with them before they left the bridgeway. Then he went aft to give orders for the lowering of the plastic observation sphere while Professor Bablon and Lieutenant Connor obtained cameras and hurried below into the belly of the ship.

The transparent observation sphere lay in a large airlock, her cables rearing back to huge drums firmly anchored in the framework of the huge beryllium ship. Inner mechanisms of the sphere enabled the occupants to raise or lower themselves at will via an electrical circuit which controlled the winding or unwinding of the cable on the reel above.

Upon a desk in the interior was a visophone with which they could communicate with the captain above, who would direct the course of the ship. There was also a row of tanks to supply oxygen and other breathable components of atmosphere while the sphere dangled in impure strata.

In the present case it was unnecessary inasmuch as Jupiter's air was quite suitable for terrestrial consumption. Nevertheless Bablon insisted they open a valve directly after they had entered through a sliding door.

The hiss of air reassured them.

"Ready aboveboard, sir," spoke Lieutenant Melvil Connor into the viso-phone.

"Ready, sir," came the steady answer from the pilot's assistant above.

Connor pressed the contact and a great door in the outer airlock swung open. With a sudden rush of paying cables the sphere swung free and descended swiftly, leaving Lieutenant Connor clinging to his chair. As empty space flashed about him he caught a glimpse of the broad belly of the *Trisonia* above, vanishing into the dark upper night with her row of huge riding-lights gradually becoming only a thin red line in the distance.

He had a disquieting sense of wonder about himself. In the first place Connor was a married man, wholly devoted to his wife though she was on distant earth. His responsibilities to her loomed large in his mind.

He had offered his voluntary services upon impulse, which he realized he should not have done in accordance with loyalty to her who was dearest to him. He had been carried away for the moment by the thought of offering his services to science. Connor never thought of himself as a hero. He was but an ordinary man, governed at times by whims not entirely logical.

He was really enjoying this wild descent with relish at the prospect of unknown dangers which is part of every man's make-up. The observation sphere was like a huge drop of glistening crystal-pure water, the tiny figures of the men seated at chairs in its center.

Through the transparent walls, gleaming crimson from the illumination below, Connor saw the swirling clouds leap up.

Then they were immersed in the blinding illumination of glowing mists outside. Connor, who was controlling the observation sphere at the desk, slowed it up considerably.

Professor Bablon, his lean hand nervously grasping the control desk, was staring expectantly downward.

Moments passed quickly in silence. Presently the mists began to thin and break. Connor caught glimpses of a steamy water-logged terrain far below, with soggy strips of moldy-looking earth rising up here and there.

He noticed that the metal objects within the sphere were glowing with a queer radiant phosphorescence that had grown with the moments spent within the red mists.

In another minute they had broken from the mists and hung suspended in a broad expanse for which the clouds formed a ceiling. A pinkish glow yet adhered to all metal objects in the sphere—Bablon's pencil, the buttons on Connor's service coat, the cable which swung down to support them—as if to remind them of the glowing mists they had just penetrated.

A bloated, flooded country lay spread below, flat and labyrinthed with waterways and lagoons. Far on the horizon a single erect column of crimson light appeared to drive straight up into the ceiling of clouds from a main lake body, emanating from some unknown source below, as light shoots solidly from a camera lens.

A blinding pillar of fire, it diffused its light throughout the ceiling vapors and reflected it in turn upon the shining waterways of the bloated boggy country, which reared its stagnated surface for the eager eyes of the earthmen.

HUGE bunches of moldy substances loomed upward in close clumps from the splotches of earth below. They assumed the proportions of great plant growths as the observation sphere descended. Mold, which is really a bacteria plant, was enlarged to immense proportions upon this stagnated portion of the great continent, shut away from natural sunlight.

Gray and bluish growths, bearing large glistening fruit-spores, thrust upward, their knobby leafless branches covered by parasites and other molds

Many types of inert plant bacteria were also represented, some of them in brilliant bloom of weird colors.

Many were large and knobby, flaunting silken sprays from their crests. Others arose in spiked array, much like piked soldiery; and through the clumps of vegetation parasite vines clambered and twined, much as live things do.

The sphere, under Lieutenant Connor's manipulation, came to rest above one of the waterways, bordered by gigantic flowers of crimson hue whose great corollas spread out to float on the slow turgid currents.

"Good Lord, Connor," cried Professor Bablon. "Look at that!"

He was pointing to a large green tetrahedron, scaly and gleaming, which had risen from the water, supported on a slender tapering beam of the same dully scintillating color. It ascended straight upward for a distance of several feet, then came to a motionless halt. The upper point of the tetrahedron split slowly, and the sections spread back like the corolla of a flower in bloom, revealing thin snake-tongue petals radiating from the center.

A huge insect, its body as large as that of a small dog, with a gossamer wingspread of twelve feet, fluttered by the sphere. Its thorax was bony and segmented. A long proboscis projected down from its beady head. After circling the observation sphere curiously it fluttered down over the newly-bloomed tetrahedron and inserted its proboscis.

In an instant, the tetrahedron closed again, snapping down over the insect. Two huge sluggish eyes opened on a knobby portion of the neck behind the triangular head. The insect fluttered vainly and with no little strength. In the struggle a great padded frog-like body appeared above the surface under the writhing tetrahedron's thin neck. Gleaming webbed claws threshed furiously, tearing upward at the insect as it hugged it close to the water.

"What a horrible creature!" gasped Connor.

"But a clever subterfuge, to imitate a flower," returned Bablon. Meanwhile the observation sphere was floating gently away from the scene toward the distant horizon, where the blinding crimson pillar of light jutted into the heavens. "There's another tetrahedron, and another. The marshes are teeming with them."

Connor peered downward and discerned many beautiful corollas standing with deceptive beauty at the edges of the waterways, while down the central current many of the living tetrahedrons floated with the stream, a ready trap for unwary insects.

CHAPTER II

The Tetrahedron Creatures

BABLON was enthused by the scientific opportunity of discovering an unknown land. "It's great! Great!" he breathed.

He took the pencil from his pocket and began to take notes. Then he stared.

The metal pencil had crumpled to a fine corroded ash in his fingers and from the ash emanated a soft crimson glow. Sudden wild suspicion flitted through his brain.

He rushed about the sphere, seizing metal objects. The buttons on Connor's coat, the metalwork of the camera, the metal portions of dials on the control desk, all crumpled to ash as he pressed upon them. Wildly, he picked up the viso-phone and snapped the contact. It was dead.

"Good heavens, Connor!" he shouted, wiping beads of sweat from his brow. "That unknown ray! It oxidizes metal almost instantly. The wiring of the viso-phone has suffered along with the rest."

Connor sprang to his feet. As he did so he brushed against one of the metal tanks which lined the walls. With a soft explosion, it fell asunder and loosed a fresh abundance of pure oxygen. Connor stiffened, frozen with fear.

"Bablon!" he cried. "Bablon! The cable!"

"*Ascend!*" shouted Bablon even as Connor leaped to the controls.

For a moment there was no response. Then the sphere shuddered in every fiber, lurched and fell. The cable had parted. The sphere plummeted down in slow rotation; Connor had a sensation of swift acceleration. Then it landed with a jar which threw both Connor and Bablon upon the bottom of the sphere, while the crimson world without was momentarily veiled by a splash of water which surged up on all sides.

For a moment, they lay prone and breathless while the sphere bobbed like a cork on the ruffled waters. Connor, who was none the worse except that the breath had been knocked out of his lungs, crawled over and helped Bablon to a sitting position. Bablon opened his eyes. At that moment, a huge tetrahedron head appeared in the waters below, close to the transparent bottom of the sphere, its sluggish eyes surveying the terrestrials with evident surprise.

Bablon gasped and it was several moments before he opened his eyes again. When he did it was to see that several others of the tetrahedron creatures were floating about, their huge wicked eyes fixed hungrily upon the earth-creatures who bobbed within the strange transparent cork so precipitately cast into their waters. It was evident that they were debating whether this was a stray bit of debris or something animate and therefore worthy of capturing.

Connor felt a strange sensation of plumbing dizzy depths as he stared into the knobby eyes below the slimy green tetrahedron mouth structures. It was almost as if sentient intelligence lay there. He gazed at them with a fit of unreasonable fright.

He wondered how long it would be before Captain Dane discovered that a useless cable dangled from the *Trisonia*. What would he do when he did? Perhaps he would become so affrighted at the ashy transformation of the cable that there would be no attempt at rescue. Perhaps they would be left forever in this moldy country beneath the crimson clouds.

At this moment Connor's attention was again attracted to the tetrahedron creatures gathered in the water about. They hovered close together and he had a conviction that they were conversing in some manner of their own. From tiny holes beneath the sluggish eyes minute streams of air bubbles were spewing forth, for all the world as if the creatures were discussing the strange advent of this unusual bottled-up thing in their midst.

Presently they placed their great tetrahedron heads against the sphere and with a concerted movement bore it along with the current.

Professor Bablon had by this time recovered from the shock of the fall and was dabbing a bloody wound on his forehead with his handkerchief. Connor expected the scientist to show signs of intense fright or regret at having placed them in this predicament. He was intensely relieved to find that Bablon did neither but was apparently accepting their situation for what it was.

The air had become stale in the sphere and Bablon busied himself opening valves in the side, too high up for the water to enter. Then they discussed their predicament. They realized their present helplessness and decided it was wisest to wait for a later opportunity of escape from the sphere.

THEY were now being borne swiftly down a waterway. The narrow winding shores slid behind, a never-ending vista of huge moldy growths, of glittering and gaudy insects and multitudinous flowers. Swarming fish life teemed in the waters. It was clearly evident that this world was lush with life.

With a steadiness of purpose which told of a predetermined destination, the sphere was being pushed toward the great beam of crimson light that shot up from this land of unaccountable wonders, to be distorted and diffused in the ceiling of clouds which hung constantly overhead.

The temperature was torpid, the humidity high. Vapors rose from the surface of the waterways and low strips of fog hung about the jungles of overgrown mold. Overhead the crimson clouds heaved and tumbled uncertainly. Bablon ventured that the climatic conditions were tropical and electrical storms probably frequent. As if to support his words there was a distant rumble of thunder, audible even in the space-sphere. It appeared to be raining on the horizon.

"Bad," said Bablon, shaking his head. "The *Trisonia*, even if it could escape the metal-crumbling property of the ray, would find it difficult to venture down through such a fierce electrical storm."

Meanwhile, the sphere was guided into a great open waterfront. Hundreds of tetrahedrons lay about and turned curious eyes upon the newcomers. Much in the fashion of curious people they swarmed about the sphere, which was being drawn toward a large irregular island.

Upon it lay thousands of the tetrahedrons, which immediately reared their great triangular heads upon long stemlike necks from their toad-like bodies. Their sluggish eyes were cocked speculatively upon the visitors.

Then the terrestrials gasped in astonishment. Long regular arrays of huts lay upon the island, huts formed of knobby stone structure which looked like lava. They were dwellings. The tertrahedrons were craning their necks from the door apertures and swarming out in very mundane fashion to sight the newcomers. There was a curious humming, an indistinguishable murmur of many sound organs, as if they excitedly discussed the prisoners.

The sphere was borne up a canal through the center of the village. Connor looked with dumbfounded eyes upon the thousands of huts which lay on either side. Waterways intersected at regular well-placed intervals, aqueous streets crowded with dwelling-places of the tetrahedron creatures. It was a gigantic metropolis of unaccountable intelligent beings. In the near distance, the crimson beam shot up into the sky, a pillar of light and an object of insatiable curiosity for the terrestrials.

At last, a great structure, centering the tetrahedron metropolis, loomed huge and rough, a black craggy mass approached by a waterway leading into an arching tunnel. The sphere was pushed and jostled beneath this arch and through various branches of the waterway beneath the great building. A vague diffused light danced on the walls of the cavernous dwelling, reflected from the gleaming crystal-pure waters of the waterway.

Suddenly, they found themselves being propelled down a long canal leading across a great chamber which resembled an amphitheatre, already rapidly filling with the tetrahedrons. On a central dais, surrounded by waterlanes, was a group of imposing creatures with gigantic swollen heads twice the size of those propelling the sphere.

One, more gigantic than the others, sat in pompous state, evidently considered a leader or king. It was before him that the sphere was brought, coming to rest upon a flight of crude stone steps leading up out of the water to his seated pedestal.

It was at once evident that a lengthy discussion was in progress among the tetrahedron creatures. Connor noticed that Bablon was staring intently into the great sluggish eyes of the king. Suddenly he turned toward Connor with an exclamation.

"Telepathy!" he exclaimed. "Connor, he's speaking to us!"

Connor concentrated upon the yellow orbs of the great creature and vague unformed thoughts twisted within his mind. He sud-

denly became aware of words forming in his brain as clearly as if someone had spoken them.

"Who are you?" came the startling question. "Whence do you come?"

Bablon turned to Connor and spoke swiftly. "Let me talk to him," he directed. "I've detected something. He is of a superstitious race and doubtful yet whether we are gods or something edible and attractive to their palates."

He turned to the king. "We are from beyond and above," he said enigmatically, gesturing vaguely upward. "From the land above the great mists."

"You look very much like the Grach-people," was the startling rejoinder.

"Who are the Grach-people?" queried Bablon.

"The people of the Ray—children of the color," returned the king. "I am Tharg, king of the Tatrons, and oft have I stolen up the river of warmth into the island of the ray and seen the Grach-people who dwell by the boiling lake of the Ray. But never have I encountered or seen such as you."

CHAPTER III

The Mystery of the Ray

"WE LIVE on a land in the red mists," cried Bablon, thinking it wise to add any superstitious belief they might have concerning themselves.

"Are you then the spirits of the dead Grach-people?" queried Tharg, extending his great tetrahedron forward on his neck and blinking his huge eyes in interest.

It had become evident to Bablon that the tetrahedron people were separated by some religious or superstitious gulf from the people who dwelt on the island within the Ray, if there were such people. So he denied that he was a ghost of the Grach-people.

"No!" he said emphatically. "We are the spirits of your people—of the Tatrons."

Tharg recoiled. There was an angry buzzing murmur of conversation between the tetrahedrons, audible through the open air valves. Finally Tharg turned.

"That is a lie!" he cried angrily. "You are the spirits of the Grach and you made a mistake and did not descend into the Ray. Our spirits do not ascend to the mists. They dwell in the boiling underground water caverns, deep in the core of this world."

Professor Bablon saw that he had fumbled and sought to rectify his error.

"We have not told the whole truth. We have come from far above the mists—from another world!"

"Liar! Base liar!" snapped Tharg. "There is nothing above the mists. And some of our people saw you fall from the mistland into the water."

Bablon subsided into silence, looking at Connor and shrugging. "Well," he said. "I guess that settles our being gods."

"What's the difference?" said Connor. "We'd probably have to fight our way out of here anyway. And we're weaponless. This crowd doesn't look like a picnic gathering."

Bablon agreed. The thousands of tetrahedrons swarming the amphitheater were working themselves into a state of vicious anger if their attitudes portrayed their inner feelings. An irate murmur arose, Tharg consulted with his fellow tetrahedrons. Finally he turned on the terrestrials with the mien of a judge at last arrived at his decree.

"You are gods of the Grach-people," he announced bluntly as if that score at last were settled. "We do not wish to anger you nor do we wish you among our peaceful people.

"So at the next dance of the Ray, when the gods in the mists above roar and throw darts of fire at one another and the Grach-people gather on the island for the spirit dance, we shall set you among them and see whether you are their spirit-gods or not."

Bablon became very curious at this decision and asked many questions concerning the Grach-people, Children of the Ray, but Tharg was contemptuous in his belief that Bablon was trying to pull wool over his eyes.

"Take them away," ordered Tharg to the attendants in the stream. "Keep them under guard till the gods of the mistland roar out the time for the Dance of the Ray-children."

"Just a moment," cried Bablon. Then he sought to communicate to Tharg a need for food and water. To his surprise, Tharg

acquiesced readily and assured him they would be fed.

Then the sphere was pushed back down the waterway through mobs of splashing tetrahedrons. Some of them opened corolla-like mouths to snap at the glassite surface but the guards shoved these back roughly. From the main audience chamber they were moved up waterways which intersected like so many corridors, to a dark canal ending in a low-arched doorway.

Beneath this arch they were led into a cell-like room, barely illuminated by the phosphorescent quality of the water. Their sphere was pushed upon a dry rock shelf at the rear of the chamber.

Three of the tetrahedrons stationed themselves in the water below the archway as guards. The others hurried off, presently to return bearing a quantity of vegetable substance in their huge mouths. This they deposited upon the rocky shelving beside the sphere and left.

"What in the name of mud—" began Connor.

"Food," cried Bablon. "It's the food we were promised."

AFTER discussing the advisability of leaving the sphere's protection Connor decided to chance it. Opening the sliding door he dashed out. For the first time he noticed the heavy gravity of Jupiter tugging at his muscles.

Heretofore he had been supported wholly or partially by the sphere's walls. Now he staggered beneath the great weight. Seizing an armload of the weedy substance he clambered clumsily back and slammed the door tight, much to the obvious astonishment of the guarding tetrahedrons.

They found the queer substance edible and palatable, though unfragrant. One of the tetrahedron creatures who had brought the vegetable matter presently hurried back. He opened his large flowerlike mouth and deposited several gleaming water-fish by the sphere, grotesque and obviously dead—a spectacle wholly unappetizing to the terrestrials. Bablon sought to converse with the tetrahedron mentally

"You are a Tatron," he began.

The sluggish eyes turned to fasten on Bablon. "Of a surety."

"Then you know something of the island within the ray—of the Children of the Ray. What is the Ray? Whence does it emanate?"

The tetrahedron evidenced immense surprise at these questions, but at length reluctantly replied.

"The Ray is the eye of Tara," he said. "Tatra, god of creation and source of energy. The Children of the Ray are slaves to him They live from their offerings to the almighty Tatra, feeding from the scalded bodies which wash up from the waters of the ray."

"Scavengers!" cried Professor Bablon.

The Tatron hesitated. It was evident that he did not wholly comprehend the meaning of the term. He appeared to be displeased, then disregarded it.

"We, the Tatrons, are the true people—Tatra's people. Many generations ago our ancestors came from the Ray. Our seed is generated from the ray. Eventually, when we are old and helpless, we shall return to the Ray. Our bodies shall be cast up from the burning water but our spirits will never arise.

"They will descend forever downward to the everlasting happiness of Tatra's kingdom beneath the ground. And our bodies will wash up on the shores of the burning lake on the island to be devoured by the slavish Children of the Ray."

This oration had been delivered stentoriously and with much inner feeling but Bablon didn't get much out of it. He looked at Connor and shook his head.

"Beyond me," he said. The terrestrials were made to understand that the Ray was the whole source of the Tatron's theory of existence. Energy and creation came from the Ray. Bablon asked with some curiosity why the Tatrons were afraid of the Ray if it was their essence of creation and existence.

At this a series of frightened awed thoughts came jumbling from the tetrahedron's mind. It was plain that he was afraid of the Ray, yet revered it. He feared the Children of the Ray because they were inviolate as slaves of his god.

"The Ray is the beginning and the end," he said at length. "Yet we who are the real people love our life. We would not have the ending bordering swiftly on the skirts of the beginning. We love life. Therefore, the Ray, which is ever-changing, is not for us

till the end. Tharg is beginning to lose fear. Soon he will go again into the Ray, never to return, and another will take his place."

"Go into the Ray!" ejaculated Bablon, not comprehending the vague reasoning. "But he fears it!"

"All fear it," returned the tetrahedron. "Yet all must go back, back to the beginning. And Tharg will soon go back to the Ray, which is the beginning and the end together."

"But look here," cried Connor suddenly. "What of these Grach-people? Will they welcome us into their dance, this Dance of the Ray?"

"Welcome you! exclaimed the tetrahedron. "Welcome you, who have deserted! Welcome the spirits who are neither the beginning nor the end! No—they will drive you back, exorcise you into the lands of mists above."

The tetrahedron left them in a maze. Bablon tried to form some idea of the crude religion of the Tatrons upon the basis from which all superstitions originate. In some respects they were identical. The eternal circle of life was obvious, yet the emphasizing of the difference between the beginning and the end, with the interim cycle between, was confusing.

Only one point was evident. A race, somewhat similar to themselves, lived on an island in the center of the territory from which the Ray shot upward. During a religious dance in which the Tatrons worshiped their God of Creation, Tatra, the sphere would be pushed into their midst so that they, if they were indeed spirits of the Children of the Ray, could be exorcised back to the spirit-land in the mists above.

"This Ray itself," said Connor. "What do you make of it?"

Bablon shook his head.

"I don't know," he said frankly. "The red spot of Jupiter has always emanated a ray which could not be defined through a spectroscope. This ray evidently has the peculiar property of rapidly oxidizing metals. It is perhaps for this reason that the country is so moldy and vegetative, all the metal ores having oxidized.

"Yet the source of the Ray is something I cannot understand. I think it must be some chemical accident in the body of Jupiter itself which emanates these rays—rays which for some peculiar reason are invisible until they strike the waters of this curious red spot region.

"Perhaps the frequency is altered by liquids, changing to visible light. I'd give half of my life to return to earth with a knowledge of this Ray, even to communicate with earth. But it seems impossible, even if we could determine its source."

CHAPTER IV

Horrors of the Red Spot

BABLON sat back against the wall in a mood. Connor, who realized that hopes of their ever returning to earth were slim, hesitated about raising his spirits with false hopes. Connor rarely dwelt on hopes, preferred rather to accept life as it came with as good grace as possible and wait for opportune chances. Nevertheless his thoughts returned gloomily to his wife, far away on the earth, whom he would probably never see again.

Captain Dane would of course eventually find the charred cable, whose severed end marked the erstwhile presence of the observation sphere. From the simple deduction that the red ray had caused the disintegration of the metal he would never venture the *Trisonia* down in an attempt at rescue.

Connor rather hoped that Dane wouldn't be so foolhardy. If the great space-ship blundered down through the clouds to find suddenly that her metal parts had crumbled to nothingness, a catastrophic wreck could not be averted. Her entire body of passengers would be marooned hopelessly and indefinitely in this crimson-hued, cloud-ceiled country under the red spot of Jupiter.

Time passed with aching slowness. The terrestrials feared to venture from their sphere. It was only with the utmost caution that they slipped from its protection for the food brought regularly by the tetrahedron creatures or to kneel at the water's edge to slake their thirst.

The tetrahedron brought food three times. Twice Bablon sought to gain more information from the creature but his replies were so vague as to be enigmatic. After what

might have been a day or several days, measured by earth chronology, a surge of tetrahedrons entered the cell-like chamber.

Once more the sphere was shoved down into the water and through the devious corridors leading from the main dwelling to the streets of the tetrahedron city. A vast conclave had gathered in the streets, eagerly awaiting the appearance of the captives.

Overhead the sky was lowering and downcast. A suggestion of impending electrical storm hung omnipresent in the frowning clouds which tumbled uneasily about, a turmoil illuminated by the crimson pillar of light in the near horizon.

The sphere was pushed through the crowded streets of the city and down a waterway which left the city behind. Yet the Tatrons surged about and came after it in a teeming threshing herd. It was evident that excitement was promised.

The terrestrials sensed that it had to do with their predicament. They looked forward apprehensively to the coming ordeal in which they would meet the Children of the Ray in the unpromising role of wayward spirits ventured from the mist-country above.

Vague streaks of lightning appeared in the clouds above, giving a weird flickering illumination to the struggling mass of tetrahedrons. Connor searched the clouds, faintly hoping to see the broad bulk of the *Trisonia* jutting down. Yet he hoped more strongly that Captain Dane had taken warning from the charred cable which had been drawn back overhead.

After winding down a devious waterway from the meropolis the sphere was pushed out again upon the inland sea. It seemed phosphorescent, alive and glowing with deep inner light. Far out in its center rose the crimson pillar of fiery red at whose base jutted a rocky island of great black crags. It seemed almost as if the island were the maw of some leviathan monster of the deep, rearing its snout to spout fire up into the heavens.

With the entire population of the tetrahedron city swimming in its wake the sphere pushed forward. The island loomed larger

[*Turn page*]

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and rockier as the distance decreased. Despite the protection of the sphere the terrestrials were awed by the weird spectacle of the fiery ray of light shooting up into the cloud ceiling, of the weird creatures in their wake. They noted with growing alarm that the interior of the sphere was becoming hot and stifling.

"The water is almost boiling!" cried Professor Bablon in alarm. "I thought so. There's every indication of hot chemical springs on that island."

AS THE sphere increased in warmth their excitement heightened. If they were forced to leave its protection they would be helpless against these creatures, to say nothing of the unknown Grach-people who lay ahead of them.

"I'm cookin'!" cried Lieutenant Connor, drawing his feet up from the floor and perching them on the edge of his seat. Professor Bablon did likewise. He wiped the beads of perspiration from his features and stared ahead. Rough serrated cliff walls of blue flinty rock walled in the island.

The sphere was shoved along the base of the precipitous wall to a great canyon opening into the interior. A broad murky river flowed down from the canyon, scabby with bubble-scum and steaming with heat. It disappeared around a turn of the lofty black canyon walls ahead. Without hesitation the tetrahedrons pushed the sphere up the great turgid river.

Lieutenant Connor was sweating bucketfuls. Heat was reddening his skin and cooking his flesh. He thought he could not stand it another instant. An eternity of time seemed to pass as they were shoved up that great steaming river, filthy with scum and emanating intense heat.

"The things must be immune to heat, professor!" he gasped, stripping off his shirt and jerking open the air valve which let the atmosphere circulate rapidly into the sphere.

"Not quite!" wheezed Bablon. "They're squirming. I imagine it must be a religious duty for them to endure the heat. This is their island of the gods, remember."

It was true. Even the tetrahedrons were squirming and writhing with silent pain. Their mecca was ahead of them. Overhead shot the great red-hot ray. They clung in masses to the canyon walls to absorb some of their cooling temperature. But they bore it without murmur.

After an interminable period in which Lieutenant Connor seemed to be cooked to a rare turn, the precipitous walls on either side of the river suddenly fell away. They could see a gap ahead through which the crimson pillar was visible, blinding in its intensity.

The canyon walls then fell away to rocky shelves upon either side of the river and they could see a central lake within the pillar of light, a lake which was bubbling and boiling, sending great splashes of steam high into the air. The sphere was being shoved close to a ledge at one side of the river's mouth.

"Man!" cried Connor in agony. "I can't stand this any longer. When the sphere grounds let's open the door and jump. Maybe we can outrun these creatures."

Professor Bablon nodded mutely. Huge drops of sweat were blinding him and he was gasping weakly for breath. They couldn't stand it much longer.

As the tetrahedrons pushed the sphere upon the shelf Connor leaped upon the painfully hot floor. It burned even through his shoes as he seized the door handle, which burned his hand terribly. But he threw it open. Then he leaped, landing upon the ledge, which was littered with bleached bones and shells. A moment later Professor Bablon was at his side, staggering under the tremendous gravity of Jupiter.

The pillar of fire which rose before their eyes was blinding. Behind them the tetrahedrons were crawling weakly upon the beach and the two earth-men ran, staggering down the long expanse that sloped up to a great natural rampway to scale the precipitous heights of the perpendicular lake-walls.

Far overhead they heard the distant rumble of thunder. Jagged lightning flickered, changing the hue of the pillar of light. It was obvious that a tremendous upheaval of nature was gathering.

"I'm done!" cried Professor Bablon, stumbling but catching himself. He stopped, wheezing for breath. Lieutenant Connor cast a backward glance. The tetrahedrons, their huge triangular heads upheld by long stem-like necks, were crawling in a slow living surge after them, the padded feet of their toadlike bodies urging them forward with all possible haste.

"Not yet!" cried Connor. "They can't catch us! Come on." He grabbed the shoulders of the elderly man and, half-supporting him, staggered up the great rampway which appeared to be the only way of retreat from the tetrahedrons.

CHAPTER V

Rescue from Above

BEHIND them, with painfully slow patience, crawled the tetrahedrons, their sluggish eyes fixed upon the fugitives. Connor's chest was a mass of aching nerves. His eyes were smarting and blurred. Yet he staggered on with Bablon for what seemed an eternity, weighed down by the great gravity.

The slope went up and around, the perpendicular lake-wall dropping at one side into the blinding light-pillar, then ascending to the knoll which lifted its great head against the pillar of illumination. Connor thought they had breasted the heights but as they staggered over the knoll he let out an ejaculation of dismay.

Before them was the highest elevation of the island. Beyond rose a series of gray rocky mounds, which dropped toward the outer island shores. A great rocky shelf jutted out over the pillar of light, which shot up from below.

And upon the heights of this jutting shelf were countless leaping gyrating figures, strangely anthropomorphic, yet possessed of insect-like bodies segmented and with gleaming black crustaceous coverings. This was the Grach-people. They were absorbed in

[*Turn page*]

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a mad whirling dance and did not seem to have noticed the terrestrials in their frenzy.

Connor cast about quickly for a hiding place, since they were spent. He led the choking scientist over into a crumbled crevice, which split across an upthrust ridge of rock. He fell into the dark opening and hissed for his companion to be silent.

For long they lay there in hiding, panting horribly. It seemed to them, that they could not have escaped being seen but as yet there was no pursuit.

"We can't stay here!" cried Connor. "Those tetrahedrons—they'll find us sooner or later. We'll have to make a break for it."

Bablon merely gasped in mournful acquiescence. There appeared to be no escape. Even were they to elude these creatures by some fortuity, there was the heated lake to cross again. It seemed hopeless. Connor peeped over the edge of the crevice. Bablon followed his example. Beyond the dark ledge with its gyrating figures rose the mysterious pillar of light.

"Look here, man!" gasped Professor Bablon in sudden astonishment. "I've got it —the explanation of the ray! Why, it's simple. Jupiter's interior is as yet molten—do you see?

"This lake must descend to the hot core. There's some gigantic chemical action taking place down there, generating molten heat and giving off light. This upper water merely acts as a lens for the light emanating from the molten core of the planet."

It sounded plausible. Chemical springs are common on earth but not of such huge proportions. The molten interior cast up an intense ray, which penetrated the waters and rose into the air. Inasmuch as the steam of the chemical springs constantly generated huge mantling clouds overhead, the ray was diffused into a huge reddish splotch of clouds. From the earth it had been an anomaly. Yet its explanation was simple.

The strange property of swiftly oxidizing metals must have been caused by some unknown chemical reaction in the core of Jupiter itself.

As the terrestrials watched, the first of the tetrahedrons reached the shelf. The leaping Grach-people sighted them and opened a

way. A fanatical frenzy seemed to possess the tetrahedrons. They threw themselves prone before the Children of the Ray and the older ones detached themselves from the mass and crawled over to peer down into the bubbling cauldron of the huge mineral spring.

Some of them appeared blinded by the intensity of the light and fell sprawling over the brink of the precipice. Others hurled themselves over deliberately.

"A fanatical religious sacrifice!" said Professor Bablon. "Savages all the world and planet systems over feel similar urges. Upon primordial earth death-sacrifices were common.

"Apparently, the tetrahedrons, like the early earth-people, consider heat, which is an inexplicable phenomena to them, as being the origin of life. Primitive races of the earth have the same idea incorporated in their Sun-worship."

"But the Grach-people!" cried Connor. "They seem dull and unintelligent. What possible connection can they have with the religion of Tatra?"

"I can think of none," said Professor Bablon, "except that they are insectivorous. Perhaps they wait for the dead cooked bodies of the tetrahedrons to be washed up on the shores so that they can eat them. Perhaps they too worship heat blindly."

Bablon's face became frozen with horror. From directly behind them, a huge tetrahedron-shaped head had arisen upon a slim neck. The great rose-petal lips peeled back and it jabbed downward. Bablon screamed, warding off the blow with a futile gesture of his elbow. The Tatron had crept upon them unawares.

LUCKILY, the tetrahedron miscalculated his strike and vented his fury upon a jut of the rocky crevice, merely tearing the sleeve from Bablon's arm and leaving a bloody scratch. Connor whirled, struck once at a great sluggish eye which blinked painfully under the blow. Then the two terrestrials scrambled out of the crevice.

A glance about sufficed to fill them with horror. The tetrahedrons had adopted a

[*Turn page*]

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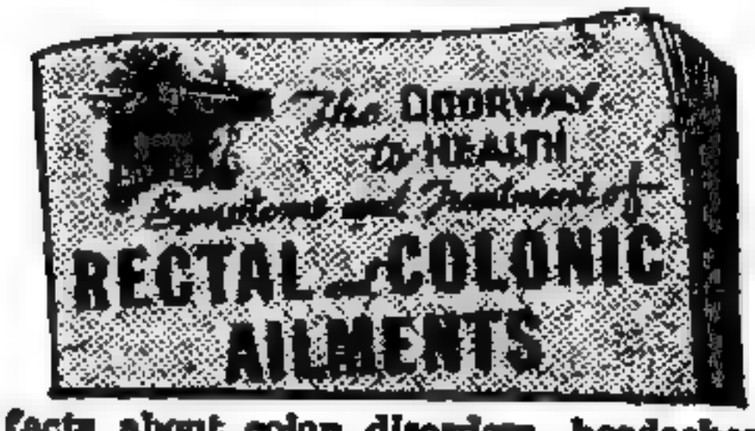

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wide moon-shaped formation which was sweeping up to the ledge. Escape was impossible. A living stream of sluggish malevolence, they came on slowly, forcing the terrestrials to retreat from their crevice down toward the dancing Grach-people.

The insect-like things, standing on segmented legs, seemed affrighted at the approach of the terrestrials and retreated before them. They appeared to have little intelligence, and were probably greatly overrated by the superstitious tetrahedrons.

Advancing ahead of the tetrahedrons was a huge figure which the terrestrials recognized. It was Tharg, their king.

"Hemmed in!" gasped Bablon. "We can't escape now!"

The sluggish eyes of Tharg fixed upon him intently. Connor became aware that it was speaking telepathically.

"The Grach-people refuse to know you!" cried Tharg.

"Yes," fended Professor Bablon desperately. "We are not of the spirit-people of the Grach."

Tharg appeared to absorb this. "But neither are you the spirit people of the Tatrons who dwell in the living fires beneath the earth. Therefore you must die in the name of Tatra, God of Heat and Creation, the beginning and the end. It is the same. You must descend to him."

"You mean down into that?" cried Bablon.

For answer the king advanced menacingly. His minions followed closely.

"We've got to make a fight!" cried Connor. "Attract his attention. I'm going to make a dash for him. We'll take him with us anyhow."

Professor Bablon nodded. His hand was trembling but he too knew how to die. From far overhead came the distant rumbling of thunder. Vivid lightning jags preceded the impending storm. It was a fitting scene for violent sacrifice.

Suddenly a burst of swift staccato reports cracked and popped from the upper air. The Tatrons paused and their great eyes stared upward. Then they winced in supernatural awe. Tharg too had hesitated. He cowered back in fear.

Connor looked up. The end of a dangling line was swinging high in the air, close to the pillar of light. Majestically it swept across the sky, a streamer of tiny sparks flashing toward the pillar of light in its trail.

"The *Trisonia!*" shouted Professor Bablon in astonishment. "They're dangling a rope through the cloud barrier!"

Connor stared. The great line had come slowly about and was swinging across and toward them. Somewhere above Captain Dane was fishing at random for the terrestrials he dared not descend to rescue.

"Catch the rope!" yelled Connor. "*Grab it!*"

He sprang forward. Tharg also leaped, opening his great head in a lightning jab for Connor. But Professor Bablon had stiffened, seemed to go suddenly mad.

"Connor!" he shouted. "Drop, you fool! Can't you see? Those clouds above are about to break—they're loaded with static electricity and this point on the island is loaded with an opposite charge. That line will short-circuit millions of volts! *Connor!*"

Professor Bablon flung his body forward and grasped the lieutenant in his arms, tripping him. They fell in a writhing heap. Tharg was staring at the dangling thing reaching down from the sky. Into his brain came the thought that indeed these creatures were spirit-people of the Grach and that their own kind were rescuing them.

Connor fell blindly, cursing. Professor Bablon's long arms held him down. He felt that they were lost, that Tharg and his hideous subjects would fall upon them and mangle them to death.

Then a blinding flash of white heat rent the air—followed by a tremendous detonation. Connor was blinded but his eyes had caught an instantaneous picture of a great lightning flash leaping down the dangling line. Tremendous static electricity raced down to the highest point of contact, which happened to be King Tharg. Following the titanic rumble of thunder the storm broke.

CONNOR was stunned. His ears rang. His eyes ached. Yet he realized that he must get up, that the hordes of Tatrons

[*Turn page*]

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would soon be surging over them. Water was pouring over his body in streams, heating his face in great continuous drops.

He loosed the strangely limp arms of the scientist and struggled to his feet. At last he could see dimly, a white unnatural vision which gradually became normal as his eyes readjusted themselves.

At his feet lay Professor Bablon, stunned, beaten by the rain pouring viciously down. He saw a charred scorched thing some distance away which had been King Tharg a few moments before. Or had it been years? Where were the Tatrons?

Dimly he saw them through the driving rain, a struggling mass of superstition-crazed creatures fighting their way down the slope. The pillar of fire was dimmed and hazy through the driving storm. The bolt from heaven, which had struck down the king in their midst, had been too much for them. The Grach-people had vanished also.

He recoiled—then suddenly recognized the charred silken rope, down which a few moments before a tremendous voltage of static electricity had raced from the clouds. It was creeping by and he seized it. A moment later he was jerked viciously over the ground.

He would not let go. He was down, dragging, holding on desperately. Then the rope paused. He reached up and jerked violently several times in succession. There was an answering tug. He hoped wildly that it was from those above.

The rope remained quiescent. He swung it over near the limp body of Bablon, tied a bowline under the scientist's armpits. There was a faint pulse in the old savant's body. The length of rope he had left beyond the bowline he made fast about his own shoulders. Then he reached up and gave three titanic tugs.

For a moment there was no answer. Then, with a surge, Bablon's body left the ground behind the taut rope. An instant later Connor was jerked from his feet and the dim outlines of the ground faded beneath him. He was being pulled upward.

At last he saw a great bulk just above, from which a great port opened. Men—grotesque in space-suits—were waiting in

the airlock, were reaching down for them.

Connor lost consciousness.

When he awoke he was lying upon a cooling bed and men were speaking above him. He opened his eyes to see the uniformed figure of Captain Dane hovering over him, two white-clad physicians in the background. Connor grinned painfully. Captain Dane gripped his hand wordlessly.

"How's the professor?" asked Connor.

"All right," returned Captain Dane. "But it's the last time I'll ever let anyone out on a trip like that. When we saw what had happened to the cable we dared not venture down there. All we could do was to drag a non-metal rope through the clouds in the scant hope that you were alive down there somewhere. We've been dredging blindly ever since we wound up that charred cable."

Connor felt a knot in his throat at the devotion of the old captain for his subordinates. There was nothing he could find to say. His eyes blurred with grateful tears and he started to speak but uttered only inarticulate words.

"I understand," said Captain Dane. "Don't try!" He hurried from the room.

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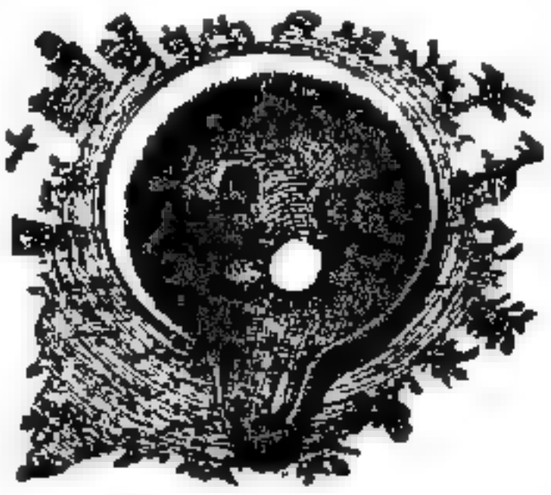

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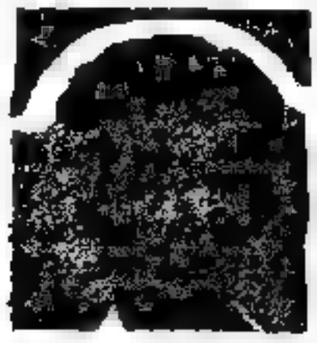

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A VISIT TO VENUS

(Concluded from page 124)

Strange how that man had dominated him, brought him on this journey that he, Loted, had known from the first could end only in the death of both of them. His own boasted power over men had only been power over their purses and food. Yet he now felt no animosity against Harley.

Padding steps were approaching but he knew that before they could reach him, he would be beyond all harm. It seemed to him that the apparatus itself reared up on long legs and fell upon him, filling the air with flying wheels that spun and gave off sparks like fireworks.

He felt his knees giving way and knew his sense of balance was gone. The floor rushed up—

But he never felt it touch him.

TRESPASS!

(Concluded from page 141)

can make that statement."

"Now see here, Mr. Figsbee," said the little man, "I have approximately three thousand dollars deposited in your banking deparament—this very building, sir. Three thousand dollars which you have held for nine hundred years. Three thousand dollars at three and a half percent interest, compounded semiannually for nine hundred years—"

"Well, look," said a janitor, "in that case I been working for you for nine hundred years, Mr. Figsbee. My wages—"

"At time and a half," said another janitor.

"With compound interest for the years it wasn't paid," added a third.

Figsbee glared around in search of Van Tuyl, but the engineer had sneaked from the building. So had Weinholter.

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COSMIC ENCORES

(Continued from page 8)

beyond the planets, of an odyssey through space that has never been forgotten by those who read it when it first appeared in WONDER STORIES more than sixteen years ago.

It tells of Knute Savary, Earth's greatest scientist, a man so far ahead of his time that he foresees the doom of our globe and seeks to control it, not through love of power, but in order to organize it for survival. Misunderstood by the lesser men and women around him, he is sent into space in his own ship, a ship so equipped that he can never land it on Earth.

Gripped by remorse, the woman who betrays him, brilliant young scientist Nadja Manners, stows away aboard and becomes his companion when he finds among the desolate asteroids a dead world on which he can bring down his ship. Together they tackle existence on strange globes, facing utterly exotic conditions and creatures—always seeking control of their environments, always seeking a route back to warn Earth of its danger and to help Earth in its hour of need.

This is science fiction at its best, be the date of its composition 1934 or 1950. It is a story which should fulfill both purposes of this magazine—to bring back stirring memories to the forefront of veteran fan memories and to present to our newer readers a great story they would otherwise have virtually no chance of ever reading at all.

There will be other novelets and stories in the next issue—drawn from a selection whose authors include John Beynon Harris, Eando Binder, Edmond Hamilton, W. S. Peacock, Paul Ernst, Garth Bentley, R. F. Starzl, Raymond Z. Gallun, Fletcher Pratt, Frank K. Kelly, A. Connell, Millard Verne Gordon, Manly Wade Wellman and Raymond A. Young.

Some of these writers are dead, some have left stf for other fields, some have bridged

[*Turn page*]

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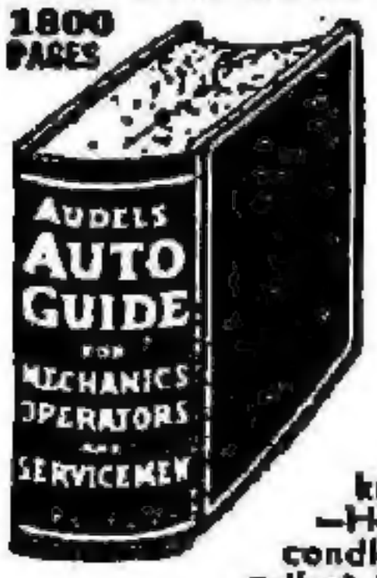

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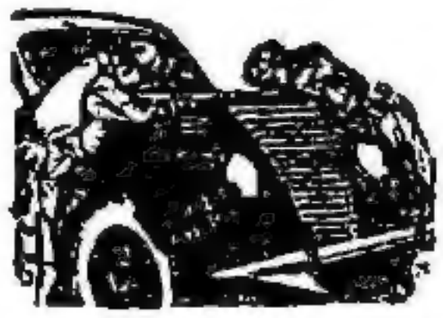

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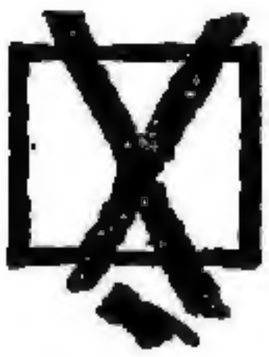

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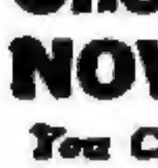

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THE EDITOR.

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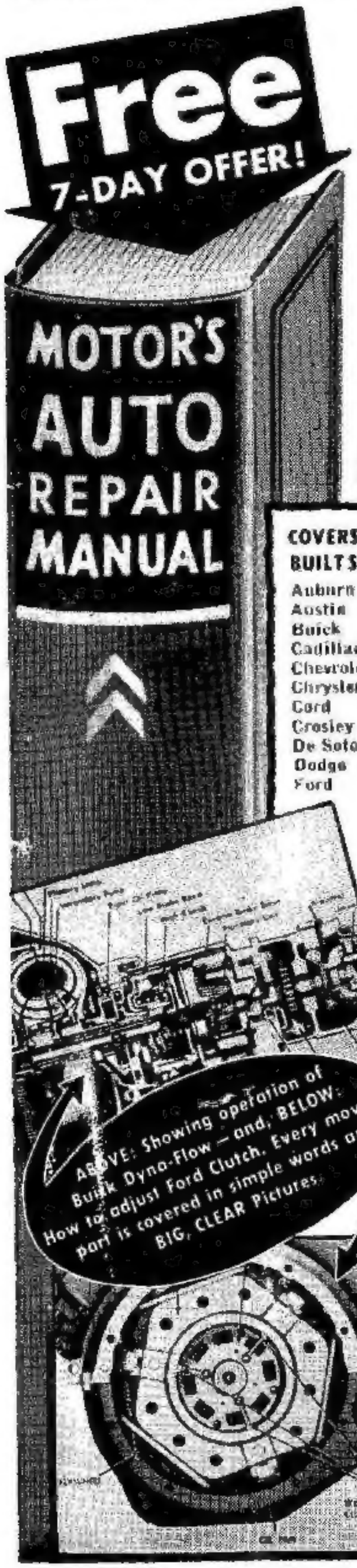

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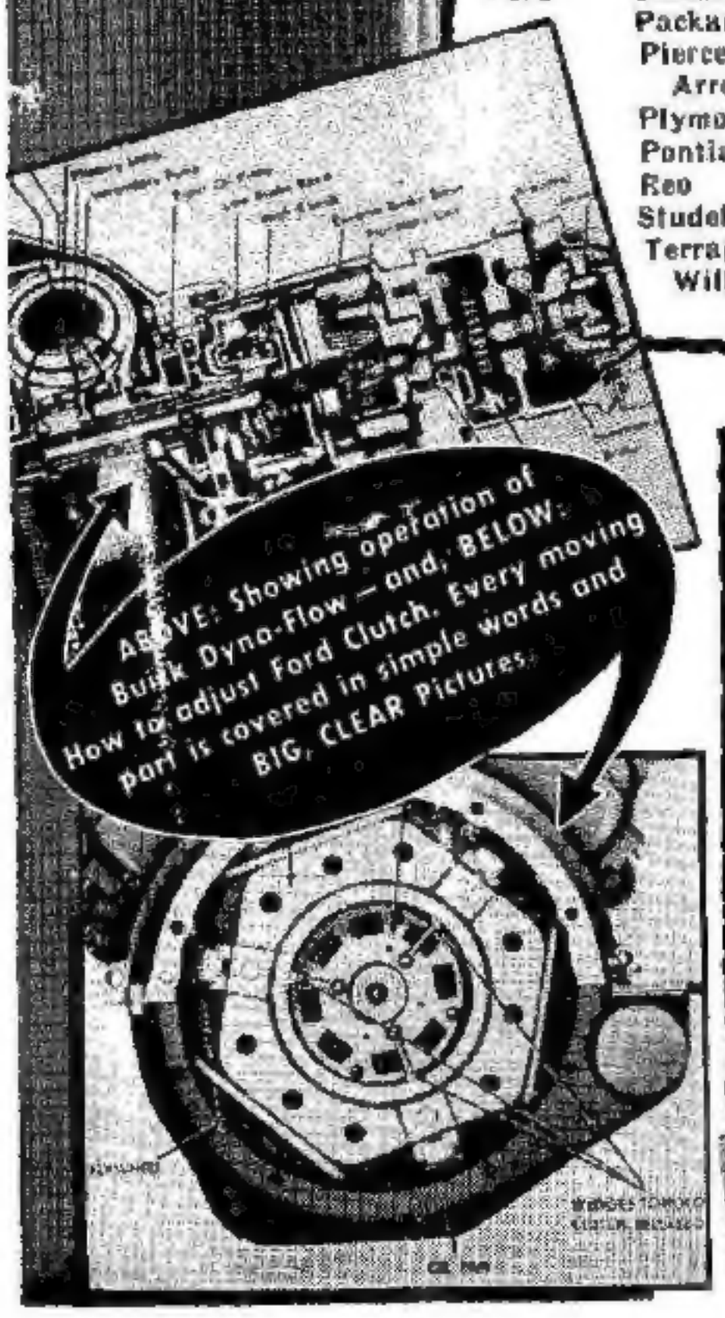
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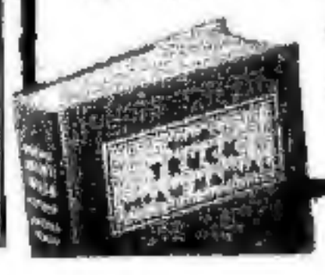

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